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Groundwater Sampling Report (November 2018 Sampling Event) Liberty Industrial Finishing Site Site #1-52-108 Work Assignment No. D007626-17.2

Draft

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1.0 Introduction

AECOM Technical Services Northeast, Inc. (AECOM) has prepared this Groundwater Monitoring Report for the Liberty Industrial Finishing Site in Brentwood, New York (Site No. 1-52-108). This work was performed for the New York State Department of Environmental Conservation (NYSDEC) under Work Assignment D007626-17.2. Sampling rounds 1 through 5 were conducted by AECOM under Work Assignment D004445-14. As part of the long-term monitoring plan for the Site, groundwater samples are collected from selected monitoring wells once every five quarters. This groundwater monitoring report provides the results of the groundwater sampling data collected in September 2017.

Ten rounds of groundwater sampling have been conducted at the Site since 2006 when long term monitoring began.

- The first round (Round 1) of sampling was conducted in June 2006.
- The second round (Round 2) of sampling was conducted in August 2007.
- The third round of sampling (Round 3) was conducted in November 2008.
- The fourth round (Round 4) of sampling conducted in March 2010.
- The fifth round (Round 5) of sampling was conducted in May 2011.
- The sixth round (Round 6) of sampling was conducted in August 2012.
- The seventh round (Round 7) of samples was conducted in November 2013.
- The eighth round (Round 8) of samples was collected in March 2015.
- The ninth round (Round 9) of samples was collected in May 2016.
- The tenth round (Round 10) of samples was collected in September 2017.
- The eleventh round (Round 11) of samples was collected in November 2018.

This report focuses on the most recent (Round 11) sampling event at the site and includes the data from the earlier rounds.

2.0 Background Information

2.1 Site Description

The Liberty Industrial Finishing Superfund site is located at 550 Suffolk Avenue, Brentwood, Suffolk County, New York (see Figure 1).

The Site is approximately 3.9 acres in total area of which 1.3 acres are historically undeveloped. The remainder of the site consists of previously developed areas with remnants of the former building (concrete floor slab), walkways, parking lots, and driveway areas. The Site is located in an area that is primarily residential and light commercial. A Site location map is included as Figure 1.

The Site is bound to the north by Suffolk Avenue, to the east by commercial properties, to the south by the Long Island Rail Road (LIRR), and to the west by a gasoline retailer and a shopping plaza. The parcels immediately north of Suffolk Avenue are undeveloped. Immediately south of the LIRR are the Town of Islip Athletic fields and the water supply wells for the Brentwood Water District. The Brentwood municipal water supply wells are less than 500 feet south of the Site.

2.2 Site History

Liberty Industrial Finishing Products was a metal finishing facility engaged in finishing and plating of components used primarily in the aircraft industry. Metal finishing activities included passivation, phosphatization, electroplating, conversion coating, anodizing, painting, and non-destructive testing. Industrial operation of the facility spanned the period from 1978 through 1997. When active, the industrial operation at the Site included a 30,000-square foot factory building, six underground storage tanks (USTs) for plating process and wastewater, sanitary leaching pools, and stormwater drywells. The USTs were equipped with “emergency” overflow pipes that discharged to the on-site leaching pools.

Shortly after operations began at the Site, concerns for public health and the environment resulting from operational and waste handling practices at the Site were investigated by the Suffolk County Department of Health Services (SCDHS). In 1982, surface and subsurface discharges of waste water were addressed in an Order of Consent between Liberty and the SCDHS. Corrective actions were implemented to eliminate the discharge of industrial waste water to the environment and the order was reportedly satisfied.

An inspection conducted by NYSDEC in 1984 identified deficiencies in Site hygiene and waste handling practices. Samples of the liquids in the sanitary leaching pool and the storm water dry well were collected. A soil sample was also collected near the northeast corner of the building. The sanitary system and the storm water dry well were subsequently pumped out and cleaned (July 1985).

A Phase II Site Investigation was performed in 1987 and a Phase II Supplemental Site Investigation was performed in 1991. An emergency remedial measure removed a total of 45 inches of sediment/soil from the bottom of the leaching pool (1992). As a result of the Phase II supplemental site investigation, the Site was reclassified as a Class "2" site on the Registry of Inactive Hazardous Waste Disposal Sites in February of 1994.

A Consent Order (March 1996) required that the facility conduct a Focused Remedial Investigation (FRI) to determine the extent of contamination within the six USTs and the emergency leaching pool. FRI activities were never implemented by Liberty Industrial Finishing due to financial constraints.

In 1997, Liberty Industrial Finishing removed waste materials from the on-site building.

A Remedial Investigation (RI) was performed in 1997-1998 for NYSDEC by Dvirka and Bartilucci. Based on the RI, the NYSDEC conducted a supplemental Remedial Investigation/Feasibility Study (RI/FS) of the Site in 1997-1998. The results and conclusions of the supplemental RI/FS were documented in a report by Dvirka and Bartilucci dated September 1999. Elevated concentrations of regulated metals, specifically chromium, were reported in excess of the applicable cleanup criteria in surface and subsurface soils, drainage structures, and on-site and off-site groundwater.

A Record of Decision (ROD) for the Site was issued by NYSDEC in March 1999. The ROD specified the site related contaminants of concern to include semivolatile organic compounds (phenol, benzo(k)anthracene, chrysene, and benzo(a)pyrene) in the sediment/sludge from the stormwater dry wells and metals (cadmium, chromium, copper, nickel, and zinc) in all media.

The United States Environmental Protection Agency (USEPA) conducted an emergency removal action including the removal of waste materials stored in the on-site factory building and the in-place closure of six USTs. The tanks were not removed due to the close proximity of the LIRR; however, UST in-place closure was determined to be equally protective of human health and the environment. A non-porous asphalt cap was constructed over the UST area to mitigate infiltration of precipitation into the contaminant source area (Figure 2).

All of the removal and in-place closure measures specified in the ROD were completed in September 2001. The results of these remedial actions were reported in the Final Remediation Report (Dvirka and Bartilucci, July 2002).

The property has entered the New York State Land Bank Program. The Site is currently being investigated by a third party for re-development.

2.3 Deviations from the Site Management Plan

There were no deviations from the Site Management Plan (AECOM, 2014) during this round of sampling.

3.0 Field Activities

The monitoring well survey information could not be located at the start of this project. As a part of this long-term monitoring program, each of the eight wells included in the sampling program were re-surveyed by YEC, Inc., a licensed New York State surveyor on March 21, 2007. A summary of well construction data is presented on Table 1.

3.1 Water Level Survey

Prior to the start of sampling, water levels were measured in each well to provide a synoptic event. Groundwater level measurements were recorded in the Field Notebook and on the Well Sampling Forms included in Appendix A. NYSDEC Monitoring Well Field Inspection Forms were completed for each well and are included in Appendix B. A summary of groundwater elevation measurements for all sampling events since 2006 is provided in Table 2. Each location was photo-documented and a hand-held global positioning system (GPS) unit was used to record the coordinates. The total depth of each of the 14 wells also varies significantly from 42.5 to 265 feet (ft). The groundwater elevation data are shown on Figure 3.

A groundwater hydrograph is presented in Figure 4. As shown on the figure, the groundwater elevations are very consistent from sampling event to sampling, generally rising and falling in unison. This trend was not present in the November 2013 sampling event. Using the previous August 2007 to November 2008 elevations to predict the trend for this round, the groundwater elevations should have dropped. This was not the case for three wells which exhibited rising water levels and three additional wells that did not drop in unison with the other wells. This is most evident in the four shallow wells along the southern property boundary, MW-2, MW-3, and MW-4, which are less than 100 ft apart. During the previous two sampling events, the groundwater elevations in these four wells were all within a few inches of each other and moved in unison from May 2011 to August 2012. During the November 2013 event, the water table in MW-2 rose significantly, decreased at MW-3, and dropped significantly at MW-4 so that the difference between MW-2 and MW-4 was over 3 ft. Several other wells deviated from the previous trends. The reason for these deviations is unknown at this time. The long term trend appears to have returned for the March 2015, May 2016, September 2017 and November 2018 rounds with most elevations back to their relative positions as note during the May 2011 and August 2012 events.

3.2 November 2018 Groundwater Sampling Event

Thirteen monitoring wells were identified for long term monitoring at the Site. The selected wells include MW-2, MW-3, MW-4, MW-5, MW-6, MW-10, MW-12, MW-14, MW-16, MW-18, MW-19,

MW-20, and MW-21. Well locations are shown on Figure 2. Two additional on-site wells, MW-7 and MW-17, were added to the sampling program for Round 11.

The 11th round of groundwater sampling at the Liberty Industrial Finishing Site occurred on November 12, 13 and 14, 2018. Sampling was conducted in accordance with the Site Management Plan ([SMP] AECOM, September 2014). Field measurements of temperature, conductivity, dissolved oxygen (DO), pH, oxygen reduction potential (ORP) and turbidity were collected at approximately five-minute intervals. Samples were collected after the field measurements had stabilized. The sample was collected into laboratory supplied containers and stored in an ice-filled cooler. During this round, filtered metals samples were also collected. Groundwater samples were filtered in the field using dedicated, disposable 0.45-micron filters. Filtered groundwater samples were then poured into laboratory-supplied containers and placed in an ice-filled cooler. The samples were then transported to Hampton-Clarke Veritech Laboratory via laboratory courier. Proper chain-of-custody procedures and requirements were maintained throughout the sampling event in accordance with the SMP.

3.3 Site Inspection

In accordance with the SMP, the Site was inspected on November 14, 2018 as part of the 5-quarterly sampling event. The site inspection form is included in Appendix C. The Site has been transferred to the land bank. The new owner is in the process of cleaning up the Site; however, the Site is in general disrepair. There is evidence of unauthorized entry on to the property (homeless people and local youth who use the property for skateboarding). Vegetation growth at the Site is uncontrolled. The Site is littered with trash.

The lock on the main gate is missing. The owner has removed the front gate and replaced it with Jersey barriers that can be removed by heavy equipment as the cleanup proceeds. There is general trash scattered across the site. The condition of the asphalt cap is moderate. There are several visible cracks in the pavement with weeds growing in the cracks. The inspection form is included in Appendix C.

4.0 Sampling Results

The samples from monitoring wells MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-10, MW-12, MW-14, MW-16, MW-17, MW-18, MW-19, MW-20, and MW-21 were labeled with the L- prefix to denote they were collected from the Liberty site. Groundwater samples were analyzed for target analyte list (TAL) metals using USEPA Method 6010/7470. The analyses were performed by Hampton Clarke Veritech (HCV), Fairfield, New Jersey, a NYSDOH ELAP certified laboratory (ELAP certification number 11408). The HCV data summary packages are included in Appendix D. A table showing the full data set is also included in Appendix D. A summary of the detections is presented in Table 3. The exceedances are also shown on Figure 5. Bar charts for cadmium, chromium, and lead are shown on Figures 6, Figure 8, and Figure 10, respectively. The data are discussed in the sections below.

In accordance with project plans, formal data validation was not performed. However, an AECOM chemist provided a limited review of the data packages. The review of the Round 11 data is presented in Section 4.3.

4.1 Metals Data

Concentrations of ten metals have been detected above the Class GA criterion in monitoring wells at the Site at least once during the eleven sampling events. These metals include antimony, cadmium, chromium, copper, iron, lead, manganese, selenium, sodium and thallium. The five metals in the table below were listed as contaminants of concern (COCs) in the ROD. Results of the previous nine sampling events are summarized on Table 3. The Round 11 results are shown on Figure 5.

Contaminants of Concern and Cleanup Criteria

Groundwater (micrograms per liter, µg/L)		
Cadmium	10	* (5)
Chromium	50	
Copper	200	
Nickel	100	
Zinc	300	* (2,000)
Cyanide	100	

Notes:

Contaminants of concern and cleanup criteria taken from the March 1991 ROD, Section 4.4.1
* - Indicates NYSDEC criteria has changed since 1991 ROD was issued
NC - No criterion

Monitoring well locations are shown on Figure 2. Two wells, MW-7and MW-17, are located upgradient of the former USTs. Three wells (MW-2, MW-3 and MW-4) at the Site are located immediately south of the former USTs and are considered source area wells. Four wells (MW-5, MW-6, MW-18 and MW-19) are located sidegradient of the main contamination plume. Four wells (MW-10, MW-16, MW-12 and MW-14) are located downgradient of the former USTs. Two wells (MW-20 and MW-21) are sentinel wells.

4.1.1 Upgradient Monitoring Wells

The two upgradient monitoring wells, MW-7 and MW-17, were added to the long term monitoring program for the Round 11 sampling event.

No exceedances were noted in shallow well MW-7.

Exceedances of cadmium, iron, lead, manganese and sodium were noted in the unfiltered sample from deep well MW-17 (Figure 5). The filtered sample had exceedances of iron, manganese and sodium (Figure 5).

4.1.2 Source Area Monitoring Wells

The three source area monitoring wells, MW-2, MW-3, andMW-4, were added to the long term monitoring program in May 2011 (Round 5).

During Round 11, cadmium concentrations equaled or exceeded the 5 µg/L criterion in the unfiltered and filtered samples from MW-3 and MW-4 at concentrations ranging from 5 µg/L to 98 µg/L (Figure 5). Historically, cadmium concentrations in MW-2 and MW-3 have mostly been below the criterion or not detected. At MW-4, cadmium concentrations have exceeded the criterion during all seven sampling rounds (Figure 6A).

Chromium concentrations in the unfiltered sample from MW-3 exceeded the criterion; the filtered sample was not detected. Historically, chromium concentrations in all seven unfiltered samples exceeded the criterion while only three filtered samples exceeded the criterion. At MW-4, five of seven unfiltered samples have exceeded the criterion while only three of seven filtered samples have exceeded the criterion (Figure 6A).

Iron concentrations in the unfiltered sample from MW-3 exceeded the 300 µg/L criterion. Historically, all seven unfiltered samples have exceeded the criterion while none of the filtered samples have exceeded the criterion.

Sodium concentrations in both unfiltered and filtered also exceeded the criterion in MW-3 but were below the criterion in MW-2 and MW-4.

4.1.3 Sidegradient Monitoring Wells

The four sidegradient monitoring wells include MW-5, MW-6, MW-18 and MW-19.

No COC metals were detected in any of the sidegradient monitoring wells during this sampling round.

Sodium concentrations exceeded the 20,000 µg/L criterion in both unfiltered and filtered samples from MW-18. Manganese and sodium exceeded the criterion in both unfiltered and filtered sample from MW-18 (Figure 5).

4.1.4 Downgradient Monitoring Wells

The four downgradient monitoring wells include MW-10, MW-16, MW-12 and MW-14.

Cadmium exceeded the 5 µg/L criterion in both unfiltered and filtered samples from MW-10, MW-16 and MW-14 (Figure 6B). Historically, cadmium concentrations have exceeded the criterion in every sample from MW-10, ranging in concentration from 10.3 µg/L to 80 µg/L. Six of eleven unfiltered samples from MW-12 have exceeded the criterion while only one filtered sample has exceeded the criterion. Seven of eleven unfiltered samples from MW-14 have exceeded the criterion while only two of seven filtered samples have exceeded the criterion.

Chromium concentrations in both unfiltered and filtered samples from MW-10 and MW-14 exceeded the 50 µg/L criterion during Round 11 (Figure 5). Historically, chromium concentrations in these two monitoring wells have exceeded the criterion in both unfiltered and filtered samples (Figure 8B).

Lead was not detected in any of the unfiltered or filtered samples from downgradient monitoring wells during Round 11 (Figure 10A).

During Round 11, iron and sodium concentrations exceeded the criterion in MW-12. The iron concentration in the unfiltered sample from MW-14 exceeded the criterion. Manganese concentrations exceeded the criterion in MW-16.

4.1.5 Sentinel Monitoring Wells

The sentinel wells include MW-20 and MW-21, located approximately 670 ft southeast of the Site.

The unfiltered sample from MW-20 exceeded the criterion for chromium, lead and manganese.

Iron exceedances were noted during Round 11 in the two sentinel wells in both unfiltered and filtered samples.

Sodium concentrations exceeded the criterion in MW-21 in both the unfiltered and filtered samples.

Historically, the only other exceedances noted in the sentinel wells have been a few isolated exceedances of antimony and manganese.

4.2 Filtered versus Unfiltered Metals Samples

Concentrations of total metals in groundwater samples at the Site tended to be highly variable between sampling events, as did field measurements of turbidity at the time of sample collection. Turbidity is typically correlated with the presence of suspended matter (e.g., entrained soil particles in the sample). Therefore, in Rounds 5 through 11, total metals (unfiltered) and dissolved metals (field filtered) groundwater samples were collected to evaluate the effect of turbidity on the metals concentrations.

The NYSDEC turbidity criterion is 50 nephelometric turbidity units (NTU) or less for well development and groundwater sampling (TAGM 4015; NYSDEC, 1988). At the Liberty Industrial Finishing Site, the turbidity was below 50 NTU at the time of sampling in 10 of 15 samples, ranging from 0.0 to 94.8 NTU (see the bottom row of Table 4).

Table 4 presents a comparison of the total metals and the dissolved metals data for the 15 filtered/ unfiltered sample pairs collected at the Liberty Site. The “percent dissolved” shown on the table is the ratio of the filtered sample concentration to the total (unfiltered) sample concentration.

Concentrations of metals that typically exist primarily in the dissolved phase (e.g., sodium and calcium) are not expected to be affected by filtering. Hence the two samples (filtered and unfiltered) should essentially act as field duplicate samples for these parameters, and the concentrations in the filtered/unfiltered pairs would be expected to be very similar (e.g., the filtered/unfiltered ratio is close 100% +/- 10%). The filtered/unfiltered pairs for these two compounds were generally similar in the filtered and unfiltered samples indicating good reproducibility in the sampling/analytic process. Most of the other metals are expected to be generally associated with solid particles. Therefore, it would be expected that the concentration in the filtered samples would range from similar to the unfiltered samples (for those wells with very low turbidity), to significantly lower for those wells with high turbidity (as long as the concentration is sufficiently higher than the detection for an accurate comparison). This is the case for all well samples. However, an important distinction in the data is that most of the “particle associated” metals (e.g., iron) were not detected in the filtered samples (i.e. are not soluble) except for cadmium, which was 75% soluble or greater in six out of eight samples with detectable levels in the unfiltered samples. Thus, in samples where cadmium is detected, it is also often detected in the filtered (dissolved) samples.

4.3 Round 11 (November 2018) Data Quality Review

In accordance with the project plans, data generated for this investigation were not subject to formal validation. However, AECOM’s quality assurance officer (QAO) reviewed the data for reasonableness and the presence of any anomalies, including issues identified by the laboratory in the case narrative,

and other items noted in review of shipping and handling documentation, inconsistencies with previous data, and review of the laboratory quality assurance (QA) forms. The QAO also reviewed the field duplicate data.

Filtered and unfiltered groundwater samples were collected from 15 monitoring wells on November 12, 13 and 14, 2018, and received in good condition by the laboratory (Hampton Clarke Veritech, Fairfield, New Jersey) on November 15, 2018. Samples were analyzed for target analyte list (TAL) metals (unfiltered and filtered) as sample delivery group (SDG) AD 07749. One field equipment blank was collected (FB). Samples LMW-12 (unfiltered) and LMW-12F (filtered) were designated as the quality control (QC) samples (matrix spike and duplicate analysis), for the Round 11 sampling event. The samples were prepared in two batches; 73002 for unfiltered (plus field blank) and 73003 for filtered.

For SDG AD 07749 Laboratory QC limits were met for initial and continuing calibrations, blanks, laboratory control sample (LCS) recovery, matrix spikes, matrix spike duplicates, and laboratory duplicate precision. The post digestion matrix spike exceeded limits for silver in batch 73003 (filtered samples) suggesting a low bias. Serial dilutions criteria in batch 73002 (unfiltered) were not met for magnesium, and potassium suggesting potential interference. All other laboratory QC criteria were met for SDG AD 07749.

The filtered/unfiltered data pairs (see Table 4) were reviewed for anomalies, using the USEPA Region II metals validation criteria (USEPA HW-2, revision 13; USEPA, 2006). Based on these criteria, if the dissolved (filtered sample) result exceeds the total (unfiltered) sample by more than 20 percent, the accuracy of the quantitation is suspect and both samples should be flagged (J) as estimated. If the filtered sample result exceeds the unfiltered sample result by more than 50 percent, the data is considered unusable and both samples should be flagged as rejected (R). The results of all unfiltered/filtered pairs were within limits.

One filtered/unfiltered site-specific field duplicate groundwater sample pair (LMW-14 and 14F/LMW-64 and 64F) was collected from the Liberty site in Round 11 (Table 5). In the unfiltered sample pair (LMW-14/LMW-64), relative percent difference (RPD) ranged from 0.0 to 62.5 percent, for the eight metals with results in both samples above the contract required detection limit; the high RPDs reflecting the variability associated with sediment /turbidity. Precision was good (RPD <20%) in the filtered duplicate pair (14F/64F) for the five metals with results above the contract required detection limit, with RPDs of 8.5 to 16.7 percent.

Overall Round 11 Data Quality Assessment

Field and laboratory-reported QC associated with the Liberty sample delivery group (SDG) 07749 for groundwater was acceptable. The laboratory reported that the data quality was acceptable. The data are considered usable for their intended purpose.

5.0 Summary and Recommendations for Future Site Remediation Activities

5.1 Summary of Groundwater Sampling Data

As noted in Section 4.1, five metals (cadmium, chromium, copper, lead and zinc) were listed in the ROD as COCs. Based on a review of the data from the eleven sampling events, concentrations of antimony, cadmium, chromium, copper, iron, lead, manganese, selenium, sodium, and thallium have been detected at concentrations above their Class GA criteria. Based on the November 2018 sample results, the following metals exceeded Class GA criteria in unfiltered samples: cadmium (six wells), chromium (five wells), iron (eight wells), lead (two wells), manganese (five wells), and sodium (five wells). The following metals equaled or exceeded the Class GA criteria in filtered samples: cadmium (four wells), chromium (two wells), iron (five wells), manganese (three wells), and sodium five wells).

Iron, manganese and sodium are naturally occurring metals in groundwater on Long Island. The exceedances of these metals most likely represent background conditions and are not related to previous site activities.

5.1.1 Upgradient Monitoring Wells

Two upgradient monitoring wells were added to the sampling program for the November 2018 event. Shallow monitoring well MW-7 and deep monitoring well MW-17 are located upgradient of the former plating waste tanks. There were no exceedances noted in the MW-7 unfiltered or filtered samples. Exceedances of cadmium, iron, lead, manganese and sodium were noted in the MW-17 unfiltered sample; manganese and sodium exceedances were noted in the MW-17 filtered sample.

5.1.2 Source Area Monitoring Wells

Three shallow monitoring wells (MW-2, MW-3, and MW-4) are located near the former plating waste tanks. During the November 2018 sampling event, dissolved concentrations of cadmium, iron, and sodium were detected above their respective cleanup criteria as shown on Figure 5. Unfiltered samples also included exceedances of cadmium, chromium, iron, and sodium. Historically, concentrations of cadmium have exceeded the criterion in both filtered and unfiltered samples at MW-4 during all seven sampling rounds. Chromium exceedances have been noted at MW-4 in five of seven unfiltered samples and three of seven filtered samples.

5.1.3 Sidegradient Monitoring Wells

Shallow monitoring well MW-5 is located west of the source area (plating waste tanks and leaching pools). There were no exceedances noted in the November 2018 sampling event. Historically, there

have been no exceedances of other TAL metals at this location with the exception of one exceedance of antimony and sodium during eleven rounds of sampling.

Very deep monitoring well MW-18 is screened approximately 150 ft below ground surface (bgs) and is sidegradient to the source area. There were no exceedances noted at MW-18 during the November 2018 sampling event, with the exception of manganese and sodium (both unfiltered and filtered samples). Historically, there have been a few sporadic exceedances of antimony and iron in unfiltered samples.

Two wells, MW-6 and MW-19, are screened in the Magothy Formation (approximately 250 ft bgs). There were no exceedances noted in the November 2018 samples. Historically, the only cadmium exceedance in either of these wells was in the unfiltered samples from the August 2007 sampling event. Cadmium concentrations have not exceeded the criterion since the August 2007 event in either unfiltered or filtered samples (Figure 6A). There have been sporadic exceedances of antimony, iron and thallium in these wells (Table 3).

5.1.4 Downgradient Monitoring Wells

Two shallow wells, MW-10 and MW-12, are located downgradient of the plating waste tanks. During the November 2018 sampling event, cadmium and chromium exceeded the criteria in MW-10 (both unfiltered and filtered samples). There were no filtered exceedances other than iron and sodium in MW-12, the most downgradient shallow well at the Site. Historically, MW-10 has had exceedances of both cadmium and chromium in both unfiltered and filtered samples, while MW-12 has had a few unfiltered cadmium exceedances (Figures 6A and 8A).

Two deep monitoring wells (screened approximately 100 ft below ground surface (bgs) MW-16 and MW-14 are located downgradient of the Site as shown on Figure 2. These two deep wells align with the general direction of groundwater flow leading away from the source area plating waste tanks. MW-16 is immediately downgradient of the source area, and MW-14 is further downgradient of the Site. There were exceedances of cadmium and manganese in both the unfiltered and filtered samples from MW-16 noted in the November 2018 sampling event. Iron exceeded the criterion in the unfiltered sample only. Cadmium had been detected in all the unfiltered and filtered samples at MW-16 but at concentrations below the criterion with the exception of the unfiltered sample from May 2011, September 2017, and November 2018 (Figure 6B). At MW-14, there has been only two filtered cadmium exceedance noted during the seven sampling events where filtered samples were collected. Four of seven filtered chromium samples from MW-14 have exceeded the criterion. There have been several exceedances of these two metals in unfiltered samples (Figures 6A and 8A). Historically, there have been exceedances of antimony, copper, iron, lead, selenium and sodium in these two downgradient locations (Table 3).

5.1.5 Sentinel Monitoring Wells

Deep monitoring well MW-21 had exceedances of iron and sodium in both unfiltered and filtered samples in Round 11 and manganese in the unfiltered sample. Chromium, iron, lead, and manganese exceeded the criterion in the unfiltered sample in very deep monitoring well MW-20; only iron exceeded the criterion in the filtered sample. Historically, there have been sporadic exceedances of antimony in the two sentinel monitoring wells (Table 3).

5.2 Contaminant Distribution

Isoconcentration maps of the shallow wells were prepared for filtered cadmium results and are shown on Figures 7 (August 2012), 7A (November 2013), 7B (March 2015), 7C (May 2016), 7D (September 2017) and 7E (November 2018). As shown on these maps, the filtered cadmium plume extends south from the plating waste tanks into the athletic fields. In August 2012, the leading edge of the plume extended south of MW-12 (Figure 7). Subsequent sampling events indicate that the leading edge of the plume has retreated as concentrations have dropped below the criterion for the last three sampling events (Figures 7A, 7B, 7C, 7D, and 7E).

Isoconcentration maps were also prepared for chromium results in shallow wells and are shown on Figures 9 (May 2011), 9A (November 2013), 9B (March 2015), 9C (May 2016), 9D (September 2017), and 9E (November 2018). As shown on these figures, the chromium plume extends south of the plating waste tanks similar to the cadmium plume. In May 2011, the leading edge of the plume appeared to be sinking as it was present in deep well MW-14 but not in the adjacent shallow well MW-12. The chromium plume appeared larger in the November 2013 event where concentrations at MW-10 were higher than in 2011. The May 2016, September 2017, and November 2018 contours indicate a similar sized plume as was found during the November 2013 plume where the concentration at MW-10 was similar and the concentration at downgradient location MW-14 was above the criterion.

5.3 Recommendations for Future Work

Concentrations of cadmium and chromium were detected above their respective Class GA criterion in several monitoring wells during the November 2018 sampling event; all the filtered exceedances were noted in shallow and deep monitoring wells. AECOM recommends continued sampling to determine if the cadmium and chromium plumes are migrating downgradient of the Site.

Paired filtered/unfiltered groundwater samples for metals analysis were collected from all monitoring wells in the May 2011, August 2012, November 2013, March 2015, May 2016, September 2017, and November 2018 sampling events. Cadmium appears to be present in the dissolved phase with dissolved concentrations at 50% of the unfiltered samples or greater, whereas chromium and lead are not found in the filtered samples. Filtering of samples can be discontinued, since the data have demonstrated that the presence of cadmium in a unfiltered sample does indicate site related

contamination of the groundwater, while the presence of other metals such as lead and chromium are only associated with soil particles and do not reliably indicate site related contamination.

The next scheduled sampling event at the Liberty Site is February 2020.

Tables

TABLE 1
LIBERTY INDUSTRIAL FINISHING SITE (1-25-108)
WELL CONSTRUCTION DATA

Well Number	Northing	Easting	Ground Elevation	Top of Riser Elevation	Top of Casing Elevation	Total Depth of Well
MW-1	202,384.57	2,206,633.80	92.92	91.57	92.92	42.5
MW-2	202,371.27	2,206,596.31	92.87	91.27	92.87	54.2
MW-3	202,360.99	2,206,568.43	93.08	91.25	93.08	53.9
MW-4	202,344.02	2,206,522.24	93.09	91.61	93.09	53.4
MW-5	202,308.86	2,206,350.98	92.19	93.32	93.60	50.0
MW-6	202,306.77	2,206,341.15	92.09	92.71	92.79	265.0
MW-7	202,542.57	2,206,322.39	92.23	92.18	92.36	54.7
MW-10	202,243.14	2,206,590.12	91.84	90.40	91.84	50.0
MW-12	201,973.43	2,206,863.98	91.08	89.59	89.79	49.3
MW-14	201,966.33	2,206,866.03	91.12	89.55	89.77	100.0
MW-16	202,243.14	2,206,611.76	91.97	90.48	91.97	99.2
MW-17	202,536.52	2,206,310.29	92.22	91.91	92.22	100.0
MW-18	202,101.70	2,206,373.86	93.14	91.55	92.03	150.0
MW-19	202,102.30	2,206,386.65	93.32	91.98	92.19	248.0
MW-20	201,798.92	2,206,946.09	90.27	88.59	89.08	149.5
MW-21	201,798.35	2,206,950.31	90.33	88.66	89.15	110.5

All elevations and depths in feet
Field survey performed by YEC, Inc., on March 23, 2007 and June 5, 1998.
(monitoring wells MW-1, 2, 3, 7, 10, 16 and 17 were not surveyed in 2007 as these wells were not included in the sampling at that time, these coordinates are estimated)
Horizontal datum: NAD 1927 State Plan
Vertical datum: NAVD 88, for NGVD 29, add 1.13 feet

TABLE 2
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
GROUNDWATER ELEVATIONS

Well # (screen interval)	Reference Elevation (ft, NGVD)	Total Depth of Well (ft)	Date	Depth To Water (ft)	Water Table Elevation (ft, NGVD)	Comments
MW-1 (shallow)	91.57	42.5	5/24/11	dry	NA	No water was observed in the well
			8/21/12	dry	NA	No water was observed in the well
			11/5/13	dry	NA	No water was observed in the well
			3/18/15	dry	NA	No water was observed in the well
			5/9/16	dry	NA	No water was observed in the well
			9/13/17	dry	NA	No water was observed in the well
			11/12/18	dry	NA	No water was observed in the well
MW-2 (shallow)	91.27	54.2	5/24/11	42.91	48.36	
			8/21/12	44.05	47.22	
			11/5/13	43.21	48.06	
			3/18/15	43.84	47.43	
			5/9/16	45.30	45.97	
			9/13/17	47.30	43.97	
			11/14/18	45.10	46.17	
MW-3 (shallow)	91.25	53.9	5/24/11	42.90	48.35	
			8/21/12	44.00	47.25	
			11/5/13	45.21	46.04	
			3/18/15	44.10	47.15	
			5/9/16	45.31	45.94	
			9/13/17	47.26	43.99	
			11/14/18	45.14	46.11	
MW-4 (shallow)	91.61	53.4	5/24/11	43.25	48.36	
			8/21/12	44.36	47.25	
			11/5/13	46.60	45.01	
			3/18/15	44.18	47.43	
			5/9/16	45.65	45.96	
			9/13/17	47.61	44.00	
			11/14/18	45.48	46.13	
MW-5 (shallow)	93.23	50.0	6/12/06	42.24	50.99	
			8/21/07	43.11	50.12	
			11/13/08	45.40	47.83	
			3/10/10	43.37	49.86	
			5/23/11	44.92	48.31	
			8/21/12	45.99	47.24	
			11/5/13	47.19	46.04	
			3/18/15	45.85	47.38	
			5/9/16	47.35	45.88	
			9/13/17	49.30	43.93	
			11/14/18	47.19	46.04	

TABLE 2
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
GROUNDWATER ELEVATIONS

Well # (screen interval)	Reference Elevation (ft, NGVD)	Total Depth of Well (ft)	Date	Depth To Water (ft)	Water Table Elevation (ft, NGVD)	Comments
MW-6 (Magothy)	92.71	265.0	6/12/06	42.19	50.52	
			8/21/07	43.15	49.56	
			11/13/08	45.23	47.48	
			3/10/10	43.12	49.59	
			5/23/11	44.76	47.95	
			8/21/12	45.70	47.01	
			11/5/13	45.95	46.76	
			3/18/15	48.30	44.41	
			5/9/16	47.15	45.56	
			9/13/17	49.16	43.55	
			11/14/18	45.98	46.73	
MW-7	92.18	54.7	11/12/18	45.99	46.19	
MW-10 (shallow)	90.40	50.0	5/24/11	42.12	48.28	
			8/21/12	43.18	47.22	
			11/5/13	43.10	47.30	
			3/18/15	43.30	47.10	
			5/9/16	44.50	45.90	
			9/14/17	46.49	43.91	
			11/12/18	44.40	46.00	
MW-12 (shallow)	89.59	49.3	6/14/06	39.09	50.50	
			8/24/07	39.95	49.64	
			11/13/08	42.25	47.34	
			12/23/08	41.81	47.78	
			3/10/10	40.07	49.52	
			5/24/11	41.69	47.90	
			8/21/12	42.75	46.84	
			11/5/13	43.00	46.59	
			3/18/15	42.52	47.07	
			5/9/16	43.82	45.77	
			9/14/17	46.08	43.51	
			11/12/18	44.98	44.61	

TABLE 2
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
GROUNDWATER ELEVATIONS

Well # (screen interval)	Reference Elevation (ft, NGVD)	Total Depth of Well (ft)	Date	Depth To Water (ft)	Water Table Elevation (ft, NGVD)	Comments
MW-14 (deep)	89.55	100.0	6/14/06	39.13	50.42	
			8/24/07	40.00	49.55	
			11/13/08	42.35	47.20	
			12/23/08	41.98	47.57	
			3/10/10	40.18	49.37	
			5/24/11	41.82	47.73	
			8/21/12	42.86	46.69	
			11/5/13	43.02	46.53	
			3/18/15	42.77	46.78	
			5/9/16	44.21	45.34	
			9/14/17	46.21	43.34	
			11/12/18	44.14	45.41	
MW-16 (deep)	90.48	99.2	5/24/11	42.03	48.45	
			8/21/12	43.41	47.07	
			11/5/13	44.63	45.85	
			3/18/15	43.21	47.27	
			5/9/16	44.74	45.74	
			9/14/17	46.72	43.76	
			11/12/18	44.62	45.86	
MW-17	91.91	100.0	11/12/18	45.49	46.42	
MW-18 (very deep)	91.55	150.0	6/22/06	40.76	50.79	
			8/21/07	41.25	50.30	
			11/13/08	43.80	47.75	
			3/10/10	41.82	49.73	
			5/24/11	43.41	48.14	
			8/21/12	44.47	47.08	
			11/5/13	45.69	45.86	
			3/18/15	44.46	47.09	
			5/9/16	47.50	44.05	
			9/14/17	47.74	43.81	
			11/13/18	45.70	45.85	

TABLE 2
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
GROUNDWATER ELEVATIONS

Well # (screen interval)	Reference Elevation (ft, NGVD)	Total Depth of Well (ft)	Date	Depth To Water (ft)	Water Table Elevation (ft, NGVD)	Comments
MW-19 (Magothy)	91.98	265.0	6/22/06	41.95	50.03	
			8/21/07	41.60	50.38	
			11/13/08	43.90	48.08	
			3/10/10	42.78	49.20	
			5/24/11	44.39	47.59	
			8/21/12	45.51	46.47	
			11/5/13	44.52	47.46	
			3/18/15	45.20	46.78	
			5/9/16	46.61	45.37	
			9/14/17	48.71	43.27	
			11/13/18	46.55	45.43	
MW-20 (very deep)	88.59	149.5	6/14/06	38.29	50.30	
			8/21/07	39.18	49.41	
			11/13/08	41.20	47.39	
			3/10/10	39.30	49.29	
			5/24/11	40.95	47.64	
			8/21/12	41.99	46.60	
			11/5/13	43.24	45.35	
			3/18/15	41.81	46.78	
			5/9/16	43.35	45.24	
			9/13/17	45.24	43.35	
			11/12/18	43.22	45.37	
MW-21 (deep)	88.66	110.5	6/14/06	38.30	50.36	
			8/21/07	39.20	49.46	
			11/13/08	41.47	47.19	
			3/10/10	39.31	49.35	
			5/24/11	40.94	47.72	
			8/21/12	41.97	46.69	
			11/5/13	43.20	45.46	
			3/18/15	41.79	46.87	
			5/9/16	43.30	45.36	
			9/13/17	45.16	43.50	
			11/12/18	43.20	45.46	

All measurements were taken from the top of PVC casing
Well Screen Interval

Shallow - 50 ft bgs
Deep - 100 ft bgs
Very deep - 150 ft bgs
Magothy - 250 ft bgs

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-7	MW-7	MW-17	MW-17
Sample ID	Class GA	LMW-7	LMW-7F	LMW-17	LMW-17F
Laboratory ID	Ground	AD07749-011	AD07749-012	AD07749-027	AD07749-028
Sample Date	Water	11/13/18	11/13/18	11/13/18	11/13/18
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	390	ND	5,700	ND
Antimony	3	ND	ND	ND	ND
Arsenic	25	ND	ND	2.9	ND
Barium	1,000	ND	ND	75.0	53.0
Beryllium	3	ND	ND	ND	ND
Cadmium	5	2.2	ND	***25.0***	3.6
Calcium	NC	13,000	11,000	31,000	32,000
Chromium	50	ND	ND	ND	ND
Cobalt	NC	ND	ND	2.8	ND
Copper	200	ND	ND	ND	ND
Iron	300	ND	ND	***7,700***	***1,800***
Lead	25	ND	ND	***49.0***	3.2
Magnesium	35,000	ND	ND	ND	ND
Manganese	300	ND	ND	***930***	***940***
Mercury	0.7	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND
Potassium	NC	ND	ND	6,500	6,400
Selenium	10	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND
Sodium	20,000	18,000	16,000	***23,000***	***24,000***
Thallium	0.50	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND
Zinc	2,000	ND	ND	600	260

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Upgradient Wells
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-2		MW-2		MW-2		MW-2		MW-2	
Sample ID	Class GA	LMW-2		LMW-2F		LMW-2		LMW-2F		LMW-2	LMW-2F
Laboratory ID	Ground	K0943-11		K0943-12		L1807-12		L1808-12		AC75576-029	AC75576-030
Sample Date	Water	5/26/11		5/26/11		8/23/12		8/23/12		11/6/13	11/6/13
Filtered/Unfiltered	Criteria	Unfiltered		Filtered		Unfiltered		Filtered		Unfiltered	Filtered
		conc.	Q	conc.	Q	conc.	Q	conc.	Q	conc. Q	conc. Q
Aluminum	NC	118	B	ND		602		ND		ND	ND
Antimony	3	ND		ND		ND		ND		ND	ND
Arsenic	25	ND		ND		ND		ND		ND	ND
Barium	1,000	44.6	B	44.9	B	39.5	B	31.9	B	ND	ND
Beryllium	3	ND		ND		ND		ND		ND	ND
Cadmium	5	***8.5***		***5.5***		3.5	B	2.7	B	ND	ND
Calcium	NC	16,300		16,700		20,400		21,500		30,000	29,000
Chromium	50	***51.9***		48.2		26.7		12.0	B	***62.0***	***59.0***
Cobalt	NC	ND		ND		ND		ND		ND	ND
Copper	200	24	B	ND		14.4	B	4.2	B	ND	ND
Iron	300	205		ND		***853***		ND		ND	ND
Lead	25	ND		ND		ND		ND		ND	ND
Magnesium	35,000	3,180		3,250		3,720		3,870		ND	ND
Manganese	300	ND		ND		17.7	B	ND		ND	ND
Mercury	0.7	ND		ND		ND		ND		ND	ND
Nickel	100	5.5	B	2.7	B	4.6	B	3.3	B	ND	ND
Potassium	NC	2,720		2,610		1,710	E	1,660		ND	ND
Selenium	10	ND		ND		ND		ND		ND	ND
Silver	50	ND		ND		ND		ND		ND	ND
Sodium	20,000	***21,300***		***22,400***		***21,400***		***22,900***		15,000	16,000
Thallium	0.50	ND		ND		ND		ND		ND	ND
Vanadium	NC	ND		ND		1.4	B	ND		ND	ND
Zinc	2,000	29.2	B	24.8	B	51.0		26.1	B	ND	ND

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Upgradient Wells
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2
Sample ID	Class GA	LMW-2	LMW-2F	LMW-2	LMW-2F	LMW-2	LMW-2F	LMW-2	LMW-2F
Laboratory ID	Ground	AC83866-001	AC83866-002	AC91321-008	AC91321-009	AD00074-001	AD00074-002	AD07749-001	AD07749-002
Sample Date	Water	3/18/15	3/18/15	5/11/16	5/11/16	9/13/17	9/13/17	11/14/18	11/14/18
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	1,200	ND	ND	ND	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	ND	ND	ND	ND	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	2.9	3.2	ND	ND
Calcium	NC	16,000	15,000	29,000	30,000	32,000	34,000	22,000	21,000
Chromium	50	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	***1,700***	ND	ND	ND	ND	ND	ND	ND
Lead	25	10.0	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	ND	ND	ND	ND	5,500	5,800	ND	ND
Manganese	300	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	9,600	9,700	14,000	15,000	***25,000***	***26,000***	14,000	14,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-3		MW-3		MW-3		MW-3		MW-3		MW-3	
Sample ID	Class GA	LMW-3		LMW-3F		LMW-3		LMW-3F		LMW-3		LMW-3F	
Laboratory ID	Ground	K0943-13		K0943-14		L1807-13		L1808-13		AC75576-001		AC75576-002	
Sample Date	Water	5/26/11		5/26/11		8/23/12		8/23/12		11/4/13		11/4/13	
Filtered/Unfiltered	Criteria	Unfiltered		Filtered		Unfiltered		Filtered		Unfiltered		Filtered	
		conc.	Q	conc.	Q	conc.	Q	conc.	Q	conc.	Q	conc.	Q
Aluminum	NC	346		ND		360		ND		470		ND	
Antimony	3	ND		ND		ND		ND		ND		ND	
Arsenic	25	ND		ND		ND		ND		ND		ND	
Barium	1,000	19.1	B	18.1	B	28.9	B	27.9	B	ND		ND	
Beryllium	3	ND		ND		ND		ND		ND		ND	
Cadmium	5	***6.6***		4.6	B	3.0	B	2.8	B	4.7		3.5	
Calcium	NC	16,900		16,800		28,600		29,400		29,000		27,000	
Chromium	50	***59.6***		32.6		***118***		***103***		***140***		***95.0***	
Cobalt	NC	ND		ND		ND		ND		ND		ND	
Copper	200	45.5		11.7	B	14.2	B	6.5	B	ND		ND	
Iron	300	***462***		ND		***414***		45.4	B	***650***		ND	
Lead	25	14.1		ND		ND		ND		8.5		ND	
Magnesium	35,000	2710		2,760		5,100		5,180		ND		ND	
Manganese	300	11.8	B	ND		ND		ND		ND		ND	
Mercury	0.7	ND		ND		ND		ND		ND		ND	
Nickel	100	6.7	B	4.3	B	3.8	B	3.4	B	ND		ND	
Potassium	NC	1,950		1,770		2,560	E	2,480		ND		ND	
Selenium	10	ND		ND		ND		ND		ND		ND	
Silver	50	ND		ND		ND		ND		ND		ND	
Sodium	20,000	12,400		13,200		***30,800***		***31,000***		***38,000***		***35,000***	
Thallium	0.50	ND		ND		ND		ND		ND		ND	
Vanadium	NC	1.4	B	ND		1.1	B	ND		ND		ND	
Zinc	2,000	54.9		40.4	B	19.6	B	19.3	B	ND		ND	

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3
Sample ID	Class GA	LMW-3	LMW-3F	LMW-3	LMW-3F	LMW-3	LMW-3F	LMW-3	LMW-3F
Laboratory ID	Ground	AC83866-003	AC83866-004	AC91321-006	AC91321-007	AD00074-003	AD00074-004	AD07749-003	AD07749-004
Sample Date	Water	3/18/15	3/18/15	5/11/16	5/11/16	9/13/17	9/13/17	11/14/18	11/14/18
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	1,400	ND	330	ND	240	ND	730	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	ND	ND	ND	ND	ND	ND	65	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	4.2	2.4	***7.9***	***5.8***	***9.6***	***8.5***	***5.0***	3.8
Calcium	NC	16,000	16000	26,000	25,000	23,000	23,000	17,000	16,000
Chromium	50	***170***	***61.0***	***97.0***	ND	***67.0***	ND	***52.0***	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND	58.0	ND
Iron	300	***1,800***	ND	***700***	ND	***350***	ND	***1,000***	ND
Lead	25	18.0	ND	7.2	ND	3.9	ND	12.0	ND
Magnesium	35,000	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	300	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	***24,000***	***26,000***	***26,000***	***25,000***	***32,000***	***33,000***	***25,000***	***23,000***
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	61.0	ND	ND	ND	ND	ND	88.0	63.0

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Sample ID	Class GA	LMW-4	LMW-4F	LMW-4	LMW-4F	LMW-4	LMW-4F
Laboratory ID	Ground	K0943-15	K0943-16	L1807-14	L1808-14	AC75576-003	AC75576-004
Sample Date	Water	5/26/11	5/26/11	8/23/12	8/23/12	11/4/13	11/4/13
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc.	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	2,560	ND	1,980	1,130	310	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	4.8 B	ND	6.4 B	ND	ND	ND
Barium	1,000	27.1 B	13.2 B	22.8 B	21.6 B	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	***54.2***	***19.8***	***28.2***	***27.3***	***26.0***	***21.0***
Calcium	NC	14,200	12,300	18,700	19,600	33,000	30,000
Chromium	50	***176***	***142***	***74.9***	***58.7***	ND	ND
Cobalt	NC	3.3 B	2.6 B	0.73 B	ND	ND	ND
Copper	200	137	43.5	69.7	58.9	ND	ND
Iron	300	***2,660***	109 B	***2,000***	***1,110***	***320***	ND
Lead	25	***43.2***	ND	15.5	9.8 B	ND	ND
Magnesium	35,000	1,710	1,270	2,770	2,870	ND	ND
Manganese	300	47.1 B	12.3 B	18.4 B	14.4 B	ND	ND
Mercury	0.7	0.036 B	ND	ND	ND	ND	ND
Nickel	100	43.5 B	12.8 B	17.5 B	15.8 B	ND	ND
Potassium	NC	6,600	6,790	2,340 E	2,460	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	***26,100***	***29,100***	13,400	14,400	***21,000***	***21,000***
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	7.0 B	1.2 B	4.9 B	3.2 B	ND	ND
Zinc	2,000	630	109	257	220	160	130

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Sample ID	Class GA	LMW-4	LMW-4F	LMW-4	LMW-4F	LMW-4	LMW-4F	LMW-4	LMW-4F
Laboratory ID	Ground	AC83866-005	AC83866-006	AC91321-010	AC91321-011	AD00074-005	AD00074-006	AD07749-005	AD07749-006
Sample Date	Water	3/18/15	3/18/15	5/11/16	5/11/16	9/13/17	9/13/17	11/14/18	11/14/18
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	2,200	ND	ND	ND	360	ND	1,400	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	2.1	ND	ND	ND	ND	ND
Barium	1,000	ND	ND	ND	ND	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	***20.0***	***11.0***	***24.0***	***23.0***	***95.0***	***80.0***	***98.0***	***83.0***
Calcium	NC	8,400	8,300	26,000	26,000	24,000	23,000	33,000	29,000
Chromium	50	***53.0***	ND	ND	ND	***110***	***90.0***	***100***	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	60.0	ND	ND	ND	ND	ND	110	56.0
Iron	300	***2,200***	ND	ND	ND	***430***	ND	***1,400***	***340***
Lead	25	22.0	ND	ND	ND	4.3	ND	15.0	3.1
Magnesium	35,000	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	300	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND	ND	5,000	6,300	5,100
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	ND	ND	***26,000***	***26,000***	8,900 J	12,000 J	9,600	8,300
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	220	97.0	120	110	180	140	430	260

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
Sample ID	Class GA	LMW-5	LMW-5	LMW-5	LMW-5	LMW-5	LMW-5F	LMW-5	LMW-5F	LMW-5	LMW-5F
Laboratory ID	Ground	E0833-01A	F1192-04A	G2136-07A	J0429-01A	K0919-02	K0919-01	L1807-01	L1808-01	AC75576-009	AC75576-010
Sample Date	Water	6/12/06	8/23/07	11/14/08	3/8/10	5/23/11	5/23/11	8/20/12	8/20/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	238	157 B	ND	87.5 BE	ND	ND	245	157 B	ND	ND
Antimony	3	***3.7*** B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	2.2 B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	49.3 B	50.0 B	45.7 B	49.4 B	9 B	8.3 B	56.9 B	60.4 B	ND	ND
Beryllium	3	ND	ND	ND	0.089 B	ND	ND	ND	ND	ND	ND
Cadmium	5	0.13 B	0.51 B	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	NC	19,000	15,000	16,900	14,100	6,280	5400	17,800	18,600	16,000	18,000
Chromium	50	18.2 B	42.2	7.3 B	29.0	1.8 B	0.88 B	1.7 B	1.5 B	ND	ND
Cobalt	NC	0.67 B	1.4 B	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	23.8 B	10.9 B	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	198 B	122 B	ND	107 BN	151 BN	54.3 BN	52.4 B	ND	ND	ND
Lead	25	1.3 B	3.4 B	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	2,040 E	1,870	2,040	1,830	2,370	2,140	3,210	3,390	ND	ND
Manganese	300	15.1 B	13.7 B	6.8 B	16.5 B	10.4 B	ND	68.2	67.4	ND	ND
Mercury	0.7	ND	ND	ND	0.056 B	ND	ND	ND	ND	ND	ND
Nickel	100	3.3 B	1.1 B	ND	1.2 B	2.5 B	1.3 B	2.3 B	2.9 B	ND	ND
Potassium	NC	4,330	4,500	4,380	4,740	627 B	613 B	5,410 E	5,440	ND	ND
Selenium	10	ND	7.4 B	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	4.0 B	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	4,460	7,800	7,570	6,570	8,000	7,420	18,100	19,000	9,100	11,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.59 B	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	29.1 B	18.4 B	13.7 B	15.2 B	27.9 B	24.5 B	10.5 B	10.3 B	ND	ND

Notes:
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B - Estimated value
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BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
Sample ID	Class GA	LMW-5	LMW-5F	LMW-5	LMW-5F	LMW-5	LMW-5F	LMW-5	LMW-5F
Laboratory ID	Ground	AC83866-007	AC83866-008	AC91268-015	AC91268-016	AD00074-007	AD00074-010	AD07749-007	AD07749-008
Sample Date	Water	3/19/15	3/19/15	5/10/16	5/10/16	9/13/17	9/13/17	11/14/18	11/14/18
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	500	ND	210	ND	220	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	ND	ND	61.0	68.0	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	NC	16,000	17,000	18,000	20,000	17,000	16,000	20,000	20,000
Chromium	50	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	ND	ND	ND	ND	ND	ND	ND	ND
Lead	25	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	300	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND	ND	ND	7,800	7,700
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	14,000	14,000	***21,000***	***23,000***	6,800	6,900	10,000	11,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

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Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
Sample ID	Class GA	LMW-6	LMW-6	LMW-6	LMW-6	LMW-6	LMW-6F	LMW-6	LMW-6F	LMW-6	LMW-6F
Laboratory ID	Ground	E0833-02A	F1192-09A	G2136-06A	J0429-03A	K0919-04	K0919-03	L1807-03	L1808-03	AC75576-011	AC75576-012
Sample Date	Water	6/12/06	8/24/07	11/14/08	3/8/10	5/23/11	5/23/11	8/20/12	8/20/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	398	ND	50.2 BE	ND	ND	488	ND	ND	ND
Antimony	3	***3.1*** B	***8.0 B***	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	24.9 B	29.6 B	15.7 B	11.3 B	34.4 B	33.9 B	14.4 B	2.7 B	ND	ND
Beryllium	3	ND	ND	ND	0.062 B	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	***12.6***	0.55 B	0.62 B	ND	ND	ND	ND	ND	ND
Calcium	NC	9,880	10,000	8,300	6,120	19,500	20,000	7,700	7,750	5,800	6,100
Chromium	50	0.79 B	28.7	ND	1.9 B	15.7 B	14.7 B	2.1 B	ND	ND	ND
Cobalt	NC	0.31 B	2.2 B	ND	ND	ND	ND	0.86 B	ND	ND	ND
Copper	200	15.6 B	31.3	ND	5.6 B	ND	ND	4.0 B	ND	ND	ND
Iron	300	45.2 B	***3,120***	147 B	137 BN	ND	ND	***338***	39.8 B	ND	ND
Lead	25	ND	15.8	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	2,980 E	2,630	2,590	1,970	2,190	2,240	3,180	3,180	ND	ND
Manganese	300	5.9 B	60.9	40.8 B	11.4 B	ND	ND	21.8 B	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	3.6 B	12.3 B	2.2 B	1.9 B	ND	ND	2.4 B	2.0 B	ND	ND
Potassium	NC	759 B	1,390	2,060	1,180	3,500	3,530	753 B	552 B	ND	ND
Selenium	10	1.6 B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	10,100	9,950	11,600	7,660	7,760	7,890	10,000	10,300	7,600	7,700
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	2.0 B	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	24.8 B	118	21.9 B	25.4 B	16.6 B	18.8 B	12.4 B	7.9 B	ND	ND

Notes:
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BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
Sample ID	Class GA	LMW-6	LMW-6F	LMW-6	LMW-6F	LMW-6	LMW-6F	LMW-6	LMW-6F
Laboratory ID	Ground	AC83866-009	AC83866-010	AC91268-017	AC91268-018	AD00074-013	AD00074-014	AD07749-009	AD07749-010
Sample Date	Water	3/19/15	3/19/15	5/10/16	5/10/16	9/13/17	9/13/17	11/14/18	11/14/18
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	800	ND	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	ND	ND	ND	ND	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	NC	8,300	7,900	8,800	7,900	7,800	7,600	9,800	9,500
Chromium	50	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	ND	ND	***990***	ND	ND	ND	ND	ND
Lead	25	ND	ND	3.1	ND	ND	ND	ND	ND
Magnesium	35,000	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	300	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	8,600	8,400	8,700	8,800	9,000	9,300	11,000	11,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
All values in µg/L
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ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18
Sample ID	Class GA	LMW-18	LMW-18	LMW-18	LMW-18	LMW-18	LMW-18F	LMW-18	LMW-18F	LMW-18	LMW-18F
Laboratory ID	Ground	E0868-14A	F1192-08A	G2136-02A	J0429-06A	K0919-10	K0919-09	L1807-04	L1808-04	AC75576-013	AC75576-014
Sample Date	Water	6/22/06	8/24/07	11/13/08	3/10/10	5/24/11	5/24/11	8/21/12	8/21/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	135 B	252	196 B	716 E	193 B	ND	ND	164 B	ND	ND
Antimony	3	ND	ND	***9.0*** B	***5.2*** B	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	74.8 B	92.5 B	86.4 B	103 B	101 B	104 B	61.3 B	64.8 B	62.0	61.0
Beryllium	3	ND	ND	ND	0.12 B	ND	ND	ND	ND	ND	ND
Cadmium	5	0.33 B	1.3 B	0.92 B	0.86 B	3.0 B	2.9 B	ND	ND	ND	ND
Calcium	NC	12,800	15,500	13,500	18,900	21,100	21,900	15,800	15,700	19,000	20,000
Chromium	50	3.3 B	2.1 B	5.4 B	6.5 B	3.1 B	2.3 B	1.9 B	3.1 B	ND	ND
Cobalt	NC	0.48 B	1.3 B	ND	1.0 B	ND	ND	ND	ND	ND	ND
Copper	200	ND	8.1 B	11.0 B	9.8 B	6.9 B	ND	ND	ND	ND	ND
Iron	300	212	***308***	***307***	***731*** N	***327*** N	ND	ND	277	ND	ND
Lead	25	ND	3.0 B	2.5 B	3.9 B	ND	ND	ND	ND	ND	ND
Magnesium	35,000	5,440	5,430	4,960	4,460	4,380	4,560	3,720	3,650	ND	ND
Manganese	300	169	***547***	122	***312***	***521***	***421***	39.1 B	***539***	***1,200***	ND
Mercury	0.7	ND	ND	ND	0.057 B	ND	ND	ND	ND	ND	ND
Nickel	100	1.4 B	3.1 B	3.2 B	6.5 B	3.4 B	2.4 B	ND	1.5 B	ND	ND
Potassium	NC	10,800	7,290	10,200	13,500	11,500	12,500	9,220 E	8,720	8,200	7,800
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	4.0 B	1.6 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	***30,000***	***26,700***	***29,600***	***30,000***	***28,400***	***30,200***	***26,600***	***26,000***	***25,000***	***26,000***
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.66 B	ND	0.63 B	ND	ND	ND	ND	ND	ND
Zinc	2,000	25.0 B	34.8 B	86.7	57.8	37.2 B	33.8 B	16.0 B	8.0 B	ND	ND

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
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JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18
Sample ID	Class GA	LMW-18	LMW-18F	LMW-18	LMW-18F	LMW-18	LMW-18F	LMW-18	LMW-18F
Laboratory ID	Ground	AC83866-019	AC83866-020	AC91268-019	AC91268-020	AD00074-024	AD00074-025	AD07749-029	AD07749-030
Sample Date	Water	3/19/15	3/19/15	5/10/16	5/10/16	9/14/17	9/14/17	11/13/18	11/13/18
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	ND	ND	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	ND	ND	86.0	76.0	87.0	89.0	100	92.0
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	NC	18,000	16,000	22,000	21,000	20,000	20,000	21,000	20,000
Chromium	50	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	ND	ND	ND	ND	ND	ND	ND	ND
Lead	25	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	ND	ND	5,400	5,200	5,300	5,600	5,600	5,500
Manganese	300	***950***	ND	***1,000***	***750***	***1,300***	***890***	***1,200***	***940***
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND	5,500	5,800	6,300	5,800
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	19,000	18,000	***25,000***	***24,000***	***24,000***	***25,000***	***26,000***	***24,000***
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19
Sample ID	Class GA	LMW-19	LMW-19	LMW-19	LMW-19	LMW-19	LMW-19	LMW-19	LMW-19F	LMW-19	LMW-19F
Laboratory ID	Ground	E0868-15A	F1192-07A	G2136-01A	J0429-07A	K0919-12	K0919-11	L1807-05	L1808-05	AC75576-015	AC75576-016
Sample Date	Water	6/22/06	8/24/07	11/13/08	3/10/10	5/24/11	5/24/11	8/21/12	8/21/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	53.4 B	74.9 B	ND	69.9 BE	ND	ND	ND	ND	ND	ND
Antimony	3	ND	***6.7 B***	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	14.2 B	21.5 B	20.0 B	18.7 B	13.0 B	12.6 B	11.5 B	9.5 B	ND	ND
Beryllium	3	ND	ND	ND	0.046 B	ND	ND	ND	ND	ND	ND
Cadmium	5	1.1 B	***8.0***	ND	2.7 B	ND	2.4 B	ND	ND	ND	ND
Calcium	NC	9,900	13,000	9,700	11,500	11,600	11,700	10,600	10,100	11,000	11,000
Chromium	50	1 B	2.0 B	ND	1.8 B	0.94 B	ND	0.81 B	ND	ND	ND
Cobalt	NC	ND	1.2 B	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	ND	11.7 B	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	54.2 B	221	ND	234 N	40.1 BN	ND	32.8 B	ND	ND	ND
Lead	25	ND	4.1 B	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	3,180	4,600	3,970	4,350	4,460	4,480	4,130	3,920	ND	ND
Manganese	300	3.5 B	9.3 B	14.9 B	8.0 B	ND	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	2.9 B	ND	0.96 B	ND	ND	ND	ND	ND	ND
Potassium	NC	816 B	949 B	947 B	1,070	993 B	1,120	890 B	867 B	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.3 B	1.1 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	10,200	14,400	13,400	14,900	14,600	14,600	14,500	13,700	14,000	14,000
Thallium	0.50	ND	***2.9 B***	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	42.8 B	48.1 B	30.5 B	47.0 B	28.0 B	28.2 B	ND	ND	ND	ND

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19
Sample ID	Class GA	LMW-19	LMW-19F	LMW-19	LMW-19F	LMW-19	LMW-19F	LMW-19	LMW-19F
Laboratory ID	Ground	AC83866-011	AC83866-014	AC91268-021	AC91268-022	AD00074-022	AD00074-023	AD07749-031	AD07749-032
Sample Date	Water	3/19/15	3/19/15	5/10/16	5/10/16	9/14/17	9/14/17	11/13/18	11/13/18
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc.	conc. Q	conc.	conc. Q	conc.	conc. Q	conc.	conc. Q
Aluminum	NC	ND	ND	460	ND	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	ND	ND	ND	ND	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	NC	15,000	13,000	16,000	14,000	13,000	13,000	11,000	11,000
Chromium	50	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	ND	ND	***730***	ND	ND	ND	ND	ND
Lead	25	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	5,100	ND	6,000	ND	ND	ND	ND	ND
Manganese	300	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	17,000	16,000	19,000	16,000	15,000	16,000	14,000	14,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-10		MW-10		MW-10		MW-10	
Sample ID	Class GA	LMW-10		LMW-10F		LMW-10		LMW-10F	
Laboratory ID	Ground	K0943-03		K0943-04		L1807-10		L1808-10	
Sample Date	Water	5/26/11		5/26/11		8/23/12		8/23/12	
Filtered/Unfiltered	Criteria	Unfiltered		Filtered		Unfiltered		Filtered	
		conc.	Q	conc.	Q	conc.	Q	conc.	Q
Aluminum	NC	101	B	ND		159	B	ND	
Antimony	3	ND		ND		ND		ND	
Arsenic	25	ND		ND		ND		ND	
Barium	1,000	35.0	B	32.5	B	28.7	B	28.1	B
Beryllium	3	ND		ND		ND		ND	
Cadmium	5	***10.3***		***11.3***		***36.1***		***34.9***	
Calcium	NC	18,700		18,700		25,900		26,000	
Chromium	50	***72.7***		***89.3***		***152***		***155***	
Cobalt	NC	ND		ND		ND		ND	
Copper	200	ND		ND		ND		ND	
Iron	300	245		ND		***391***		ND	
Lead	25	ND		ND		ND		ND	
Magnesium	35,000	3,700		3,590		3,640		3,650	
Manganese	300	16.8	B	ND		18.9	B	ND	
Mercury	0.7	ND		ND		ND		ND	
Nickel	100	1.6	B	0.91	B	3.5	B	3.5	B
Potassium	NC	2,380		2,530		4,810	E	4,770	
Selenium	10	ND		ND		ND		ND	
Silver	50	ND		ND		ND		ND	
Sodium	20,000	17,100		19,300		14,800		14,900	
Thallium	0.50	ND		ND		ND		ND	
Vanadium	NC	ND		ND		ND		ND	
Zinc	2,000	27.1	B	21.7	B	ND		ND	

Sample Location	NYSDEC	MW-10		MW-10	
Sample ID	Class GA	LMW-10		LMW-10F	
Laboratory ID	Ground	L1807-10		L1808-10	
Sample Date	Water	11/4/13		11/4/13	
Filtered/Unfiltered	Criteria	Unfiltered		Filtered	
		conc.	Q	conc.	Q
Aluminum	NC	210		ND	
Antimony	3	ND		ND	
Arsenic	25	ND		ND	
Barium	1,000	ND		ND	
Beryllium	3	ND		ND	
Cadmium	5	***49.0***		***50.0***	
Calcium	NC	28,000		28,000	
Chromium	50	***140***		***140***	
Cobalt	NC	ND		ND	
Copper	200	ND		ND	
Iron	300	***420***		ND	
Lead	25	ND		ND	
Magnesium	35,000	ND		ND	
Manganese	300	ND		ND	
Mercury	0.7	ND		ND	
Nickel	100	ND		ND	
Potassium	NC	ND		ND	
Selenium	10	ND		ND	
Silver	50	ND		ND	
Sodium	20,000	9,200		9,300	
Thallium	0.50	ND		ND	
Vanadium	NC	ND		ND	
Zinc	2,000	ND		ND	

Notes:
All values in µg/L
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ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10
Sample ID	Class GA	LMW-10	LMW-10F	LMW-10	LMW-10F	LMW-10	LMW-10F	LMW-10	LMW-10F
Laboratory ID	Ground	AC83866-021	AC83866-022	AC91268-013	AC91268-014	AD00074-028	AD00074-029	AD07749-013	AD07749-014
Sample Date	Water	3/19/15	3/19/15	5/9/16	5/9/16	9/14/17	9/14/17	11/12/18	11/12/18
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	ND	ND	770	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	ND	ND	ND	ND	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	***42.0***	***33.0***	***53.0***	***57.0***	***80.0***	***72.0***	***57.0***	***60.0***
Calcium	NC	22,000	20,000	22,000	22,000	18,000	18,000	29,000	27,000
Chromium	50	***92.0***	***83.0***	***130***	***130***	***82.0***	***81.0***	***120***	***110***
Cobalt	NC	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	***410***	ND	ND	ND	***2,200***	ND	ND	ND
Lead	25	ND	ND	ND	ND	11.0	ND	ND	ND
Magnesium	35,000	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	300	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	12,000	13,000	18,000	18,000	11,000	11,000	13,000	12,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
All values in µg/L
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ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-16		MW-16		MW-16		MW-16		MW-16		MW-16	
Sample ID	Class GA	LMW-16		LMW-16F		LMW-16		LMW-16F		LMW-16		LMW-16F	
Laboratory ID	Ground	K0943-09		K0943-10		L1807-11		L1808-11		AC75576-007		AC75576-008	
Sample Date	Water	5/26/11		5/26/11		8/23/12		8/23/12		11/4/13		11/4/13	
Filtered/Unfiltered	Criteria	Unfiltered		Filtered		Unfiltered		Filtered		Unfiltered		Filtered	
		conc.	Q	conc.	Q	conc.	Q	conc.	Q	conc.	Q	conc.	Q
Aluminum	NC	1,150		586		340		322		1,400		440	
Antimony	3	ND		ND		ND		ND		ND		ND	
Arsenic	25	ND		ND		ND		ND		ND		ND	
Barium	1,000	299		351		339		339		230		240	
Beryllium	3	2.0	B	1.8	B	0.7	B	0.72	B	1.5		1.2	
Cadmium	5	***5.3***		4.9	B	4.2	B	4.3	B	4.4		3.9	
Calcium	NC	9,240		9,890		12,100		11,700		9,800		10,000	
Chromium	50	11.7	B	8.9	B	2.8	B	2.3	B	ND		ND	
Cobalt	NC	ND		ND		ND		ND		ND		ND	
Copper	200	9.4	B	11.3	B	66.6		63.0		ND		ND	
Iron	300	115	B	ND		49.9	B	ND		***1,800***		ND	
Lead	25	ND		ND		ND		ND		ND		ND	
Magnesium	35,000	2,350		2,570		3,740		3,680		ND		ND	
Manganese	300	***597***		***623***		***661***		***632***		***570***		***530***	
Mercury	0.7	ND		ND		ND		ND		ND		ND	
Nickel	100	13.9	B	14.1	B	11.8	B	12.0	B	ND		ND	
Potassium	NC	4,930		4,880		6,010	E	5,860		5,100		ND	
Selenium	10	ND		ND		ND		ND		ND		ND	
Silver	50	ND		ND		ND		ND		ND		ND	
Sodium	20,000	14,700		14,500		13,900		13,500		11,000		11,000	
Thallium	0.50	ND		ND		ND		ND		ND		ND	
Vanadium	NC	ND		ND		ND		ND		ND		ND	
Zinc	2,000	67.5		69		34.2	B	33.2	B	ND		ND	

Notes:
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Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16
Sample ID	Class GA	LMW-16	LMW-16F	LMW-16	LMW-16F	LMW-16	LMW-16F	LMW-16	LMW-16F
Laboratory ID	Ground	AC83866-023	AC83866-024	AC91268-011	AC91268-012	AD00074-026	AD00074-027	AD07749-025	AD07749-026
Sample Date	Water	3/19/15	3/19/15	5/9/16	5/9/16	9/14/17	9/14/17	11/12/18	11/12/18
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	1,200	370	1,200	360	2,900	400
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	180	160	180	160	140	140	170	160
Beryllium	3	ND	ND	ND	ND	ND	ND	1.0	ND
Cadmium	5	3.9	3.4	4.2	4.1	***5.2***	***5.1***	***5.5***	***5.7***
Calcium	NC	14,000	12,000	11,000	10,000	10,000	11,000	11,000	12,000
Chromium	50	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	58.0	50.0	2.2	ND
Copper	200	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	ND	ND	***1,600***	ND	***1,800***	ND	***4,000***	ND
Lead	25	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	300	***380***	***350***	***700***	***580***	***900***	***880***	***1,200***	***1,100***
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	10,000	10,000	11,000	11,000	11,000	11,000	12,000	12,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
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ND - Not Detected
B - Estimated value
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Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12
Sample ID	Class GA	LMW-12	LMW-12	LMW-12	LMW-12	LMW-12	LMW-12F	LMW-12	LMW-12F	LMW-12	LMW-12F
Laboratory ID	Ground	E0833-03A	F1192-05A	G2415-01	J0429-04A	K0919-06	K0919-05	L1807-06	L1808-06	AC75576-023	AC75576-024
Sample Date	Water	6/14/06	8/24/07	12/23/08	3/9/10	5/24/11	5/24/11	8/21/12	8/21/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	445	9,070	2,260	33,600 E	12,000	ND	1,560	ND	810	ND
Antimony	3	1.8 B	**11.2** B	ND	***13.9 B***	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	3.3 B	ND	14.2 B	5.1 B	ND	ND	ND	ND	ND
Barium	1,000	45.2 B	75.4 B	60.5 B	188 B	88.9 B	28.1 B	44.6 B	48.2 B	ND	51.0
Beryllium	3	0.38 B	0.24 B	0.19 B	2.1 B	0.79 B	ND	ND	ND	ND	ND
Cadmium	5	0.52 B	**5.6**	***25.5***	***205***	***54.8***	4.5 B	4.4 B	***9.3***	2.9	ND
Calcium	NC	13,100	26,900	19,700	29,900	23,300	18,700	10,900	28,900	40,000	44,000
Chromium	50	2.5 B	37.5	18.9 B	***251***	***72.8***	ND	***103***	ND	ND	ND
Cobalt	NC	0.63 B	5.5 B	2.6 B	12.8 B	4.1 B	ND	ND	ND	ND	ND
Copper	200	14.9 B	85.3	63.5	***377***	147	ND	10.6 B	ND	ND	ND
Iron	300	***467***	**10,900**	***4,080***	***38,100*** N	***11,300*** N	***1,620*** N	***1,740***	39.0 B	***740***	ND
Lead	25	7.7 B	**106**	***83.7***	***553***	***230***	ND	19.4	ND	9.9	ND
Magnesium	35,000	3,710 E	6,830	4,330	10,900	5,760	3,310	2,540	5,600	6,400	7,200
Manganese	300	77.3	96.9	82.7	253	77.6	37.3 B	211	ND	ND	ND
Mercury	0.7	ND	ND	ND	0.54	ND	ND	ND	ND	ND	ND
Nickel	100	3.4 B	12.4 B	14.9 B	57.1	18.5 B	1.9 B	6.4 B	2.0 B	ND	ND
Potassium	NC	2,280	2,700	2,540	3,810	3,670	2,870	4,350 E	2,970	ND	ND
Selenium	10	2.6 B	ND	ND	***13.4 B***	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	7.6 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	11,700	13,400	***27,100***	***33,600***	8,250	7,660	15,400	16,200	12,000	14,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.77 B	28.8 B	8.6 B	89.7	33 B	1.5 B	3.9 B	ND	ND	ND
Zinc	2,000	26.1 B	246	220	1,280	488	52.1	32.5 B	55.9	ND	ND

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12
Sample ID	Class GA	LMW-12	LMW-12F	LMW-12	LMW-12F	LMW-12	LMW-12F	LMW-12	LMW-12F
Laboratory ID	Ground	AC83866-025	AC83866-030	AC91268-001	AC91268-004	AD00074-030	AD00074-031	AD07749-015	AD07749-018
Sample Date	Water	3/20/15	3/20/15	5/9/16	5/9/16	9/14/17	9/14/17	11/12/18	11/12/18
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	870	ND	950	ND	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	3.2	2.0	ND	ND	ND	ND
Barium	1,000	68.0	58.0	ND	ND	64.0	66.0	ND	ND
Beryllium	3	ND	ND	2.0	ND	ND	ND	ND	ND
Cadmium	5	***7.7***	4.4	***5.4***	ND	ND	ND	ND	ND
Calcium	NC	32,000	29,000	27,000	28,000	41,000	43,000	45,000	46,000
Chromium	50	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	NC	ND	ND	3.0	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	***900***	ND	***980***	ND	ND	ND	***430***	***310***
Lead	25	6.8	ND	11.0	ND	ND	ND	ND	ND
Magnesium	35,000	7,600	6,700	ND	ND	8,600	9,100	ND	ND
Manganese	300	ND	ND	ND	ND	ND	ND	82.0	82.0
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND	ND	ND	5,300	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	***37,000***	***37,000***	***30,000***	***32,000***	***52,000***	***54,000***	***27,000***	***28,000***
Thallium	0.50	ND	ND	***2.5***	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	78.0	ND	65.0	ND	ND	ND	ND	ND

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14
Sample ID	Class GA	LMW-14	LMW-14	LMW-14	LMW-14	LMW-14	LMW-14F	LMW-14	LMW-14F	LMW-14	LMW-14F
Laboratory ID	Ground	E0833-04A	F1192-06A	G2415-02	J0429-05A	K0919-08	K0919-07	L1807-07	L1808-07	AC75576-021	AC75576-022
Sample Date	Water	6/14/06	8/24/07	12/23/08	3/9/10	5/24/11	5/24/11	8/21/12	8/21/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	780	314	7,090	4,830 E	652	ND	314	954	5,300	ND
Antimony	3	1.5 B	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Arsenic	25	ND	ND	5.6 B	6.0 B	5.6 B	ND	ND	ND	3.2	ND
Barium	1,000	40.5 B	31.5 B	162 B	107 B	57.1 B	50.4 B	47.2 B	43.3 B	56.0	ND
Beryllium	3	ND	ND	0.38 B	0.28 B	ND	ND	ND	ND	ND	ND
Cadmium	5	4.9 B	1.5 B	***59.1***	***26***	***9.2***	***7.6***	***9.3***	3.7 B	***6.6***	2.4
Calcium	NC	13,100	12,900	35,800	18,700	18,300	18,400	28,100	10,900	11,000	12,000
Chromium	50	***95.8***	***248***	***69.6***	***68.6***	***51.3***	29.6	2.4 B	***88.2***	***170***	ND
Cobalt	NC	2.0 B	1.2 B	5.1 B	2.7 B	0.72 B	ND	ND	ND	ND	ND
Copper	200	22.2 B	8.9 B	110	42.8	13.6 B	ND	5.0 B	7.2 B	ND	ND
Iron	300	***728***	***389***	***9,320***	***14,000 N***	***1,780 N***	***1,430 N***	279	***1,180***	***6,000***	***930***
Lead	25	2.9 B	3.4 B	***221***	***76.5***	18.8	ND	ND	13.2	***53.0***	3.7
Magnesium	35,000	1,610 E	3,000	6,340	2,910	3,840	3,700	5,450	2,470	ND	ND
Manganese	300	35.3 B	21.2 B	231	186	260	235	ND	211	290	***300***
Mercury	0.7	ND	ND	ND	0.1 B	ND	ND	ND	ND	ND	ND
Nickel	100	7.5 B	4.4 B	53.2	18.3 B	11.8 B	8.7 B	1.1 B	6.1 B	ND	ND
Potassium	NC	3,320	4,140	7,090	1,670	4,430	4,570	2,990 E	4,170	5,000	ND
Selenium	10	ND	6.7 B	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.2 B	4.3 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	***31,900***	***28,900***	**561,000**	**25,400**	**20,400**	**20,300**	15,400	15,400	10,000	12,000
Thallium	0.50	ND	***3.4 B***	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.58 B	0.51 B	22.5 B	12.6 B	2.4 B	ND	1.9 B	2.3 B	ND	ND
Zinc	2,000	40.1 B	27.5 B	520	279	99.1	70.1	56.3	25.5 B	94.0	ND

Notes:
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BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14
Sample ID	Class GA	LMW-14	LMW-14F	LMW-14	LMW-14F	LMW-14	LMW-14F	LMW-14	LMW-14F
Laboratory ID	Ground	AC83866-031	AC83866-032	AC91268-009	AC91268-010	AD00074-032	AD00074-033	AD07749-021	AD07749-022
Sample Date	Water	3/20/15	3/20/15	5/9/16	5/9/16	9/14/17	9/14/17	11/12/18	11/12/18
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	1,500	ND	4,000	1,200	1,700	ND	1,400	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	3.3	2.4	ND	ND	ND	ND
Barium	1,000	ND	ND	55.0	57.0	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	3.5	2.4	4.7	ND	***5.1***	4.0	***9.1***	***8.6***
Calcium	NC	9,700	8,900	7,500	11,000	9,500	8,800	12,000	11,000
Chromium	50	***74.0***	ND	***96.0***	***56.0***	***110***	***58.0***	***120***	***63.0***
Cobalt	NC	ND	ND	2.2	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	***1,800***	ND	***4,900***	***1,700***	***2,600***	ND	***1,600***	ND
Lead	25	14.0	ND	***32.0***	9.9	14.0	ND	11.0	ND
Magnesium	35,000	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	300	130	110	91	110	59.0	45.0	58.0	52.0
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	***110,000***	***100,000***	6,300	11,000	***21,000***	***21,000***	13,000	12,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	77.0	ND	210.0	82.0	55.0	ND	ND	ND

Notes:
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NC - No NYSDEC criterion
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B - Estimated value
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BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20
Sample ID	Class GA	LMW-20	LMW-20	LMW-20	LMW-20	LMW-20	LMW-20F	LMW-20	LMW-20F	LMW-20	LMW-20F
Laboratory ID	Ground	E0833-05A	F1192-03A	G2136-04A	J0429-08A	K0943-05	K0943-06	L1807-09	L1808-09	AC75576-025	AC75576-026
Sample Date	Water	6/14/06	8/22/07	11/13/08	3/9/10	5/26/11	5/26/11	8/21/12	8/21/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	223	299	81.6 B	404 E	303	ND	411	ND	ND	ND
Antimony	3	1.7 B	***9.5 B***	ND	***4.4 B***	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	38.9 B	57.8 B	48.8 B	35.0 B	27.0 B	25.4 B	42.1 B	40 B	ND	ND
Beryllium	3	ND	ND	ND	0.057 B	ND	ND	ND	ND	ND	ND
Cadmium	5	1 B	0.45 B	0.74 B	ND	ND	ND	ND	ND	ND	ND
Calcium	NC	13,200	20,600	4,420	9,050	7,700	7,870	17,400	16,900	19,000	18,000
Chromium	50	4.6 B	3.1 B	2.1 B	5.1 B	5.1 B	1.1 B	2.0 B	0.91 B	ND	ND
Cobalt	NC	0.92 B	2.5 B	ND	1.1 B	1.2 B	0.93 B	ND	ND	ND	ND
Copper	200	13.6 B	8.7 B	ND	5.7 B	6.0 B	ND	ND	ND	ND	ND
Iron	300	***1,710***	***624***	164 B	***1,370 N***	***879***	71.7 B	***398***	ND	ND	ND
Lead	25	1.5 B	3.7 B	ND	4.9 B	ND	ND	ND	ND	ND	ND
Magnesium	35,000	6,050 E	9,820	3,400	4,400	3,790	3,870	8,990	8,870	9,000	9,200
Manganese	300	27.8 B	60.5	35.0 B	27.1 B	17.5 B	ND	23.2 B	ND	ND	ND
Mercury	0.7	ND	ND	ND	0.064 B	ND	ND	ND	ND	ND	ND
Nickel	100	4.6 B	2.4 B	1.8 B	3.5 B	1.8 B	ND	ND	1.0 B	ND	ND
Potassium	NC	2,050	2,220	8,190	1,970	2,430	2,060	1,840 E	1,710	ND	ND
Selenium	10	1.1 B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	5.2 B	0.6 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	***21,800***	***31,100***	***29,700***	***39,600***	***38,400***	***40,300***	***21,700***	***21,400***	***21,000***	***22,000***
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.48 B	1.6 B	ND	1.2 B	ND	ND	ND	ND	ND	ND
Zinc	2,000	48.7 B	32.8 B	28.5 B	187	52.5	29.7 B	ND	ND	ND	ND

Notes:
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BOLD/Italics - Exceeds criterion
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Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20
Sample ID	Class GA	LMW-20	LMW-20F	LMW-20	LMW-20F	LMW-20	LMW-20F	LMW-20	LMW-20F
Laboratory ID	Ground	AC83866-027	AC83866-028	AC91321-001	AC91321-003	AD00074-020	AD00074-021	AD07749-033	AD07749-034
Sample Date	Water	3/19/15	3/19/15	5/10/16	5/10/16	9/13/17	9/13/17	11/12/18	11/12/18
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc.	conc. Q	conc.	conc. Q	conc.	conc. Q	conc.	conc. Q
Aluminum	NC	2,000	ND	1,200	ND	550	ND	19,000	560
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	11.0	ND
Barium	1,000	ND	ND	ND	ND	ND	ND	150	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	NC	16,000	13,000	16,000	14,000	15,000	15,000	21,000	14,000
Chromium	50	ND	ND	ND	ND	ND	ND	***72.0***	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND	10.0	ND
Copper	200	ND	ND	ND	ND	ND	ND	63.0	ND
Iron	300	***2,700***	ND	***7,600***	ND	***680***	ND	***34,000***	***570***
Lead	25	6.1	ND	5.2	ND	ND	ND	***27.0***	ND
Magnesium	35,000	7,700	6,200	7,800	7,000	7,000	7,200	10,000	6,900
Manganese	300	64.0	ND	70.0	ND	ND	ND	***1,100***	62.0
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	18,000	16,000	18,000	17,000	***20,000***	***20,000***	19,000	18,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	57.0	ND
Zinc	2,000	ND	ND	1,500	ND	ND	ND	340	ND

Notes:
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Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21
Sample ID	Class GA	LMW-21	LMW-21	LMW-21	LMW-21	LMW-21	LMW-21F	LMW-21	LMW-21F	LMW-21	LMW-21F
Laboratory ID	Ground	E0833-06A	F1192-01A	G2136-05A	J0429-09A	K0943-07	K0943-08	L1807-08	L1808-08	AC75576-027	AC75576-028
Sample Date	Water	6/14/06	8/22/07	11/14/08	3/9/10	5/26/11	5/26/11	8/21/12	8/21/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	197 B	457	793 E	319	ND	746	ND	410	ND
Antimony	3	1.9 B	***6.7 B***	ND	ND	ND	ND	ND	***11.9 B***	ND	ND
Arsenic	25	2.2 B	ND	ND	ND	4.3 B	ND	ND	ND	ND	ND
Barium	1,000	79.3 B	60.9 B	58.2 B	119 B	78.8 B	76.2 B	92.6 B	85.9 B	67.0	67.0
Beryllium	3	ND	ND	ND	0.16 B	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	1.5 B	4.8 B	1.1 B	1.2 B	ND	ND	ND	ND	ND
Calcium	NC	7,520	5,190	11,900	12,600	17,000	16,900	14,300	14,200	14,000	14,000
Chromium	50	0.94 B	3.0 B	2.3 B	9.0 B	6.2 B	3.3 B	13.2 B	10.6 B	ND	ND
Cobalt	NC	0.48 B	1.5 B	ND	1.5 B	ND	ND	ND	ND	ND	ND
Copper	200	ND	13.7 B	6.6 B	8.2 B	8.5 B	ND	3.9 B	ND	ND	ND
Iron	300	31.4 B	***503***	198 B	***1,840 N***	***694***	32 B	***1,330***	ND	***760***	ND
Lead	25	ND	4.5 B	2.6 B	8.2 B	ND	ND	ND	ND	ND	ND
Magnesium	35,000	5,440 E	3,320	2,960	8,380	6,960	7,240	6,050	5,820	6,100	6,100
Manganese	300	26.4 B	51.8	***627***	57.7	36.1 B	19.7 B	96.1	56.7	100	64.0
Mercury	0.7	ND	ND	ND	0.058 B	ND	ND	ND	ND	ND	ND
Nickel	100	1.9 B	2.4 B	6.9 B	4.9 B	3.3 B	1.3 B	2.8 B	2.4 B	ND	ND
Potassium	NC	5,670	6,350	6,250	12,700	12,500	9,270	7,500 E	7,050	6,200	5,800
Selenium	10	4.1 B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	***24,500***	***27,200***	19,200	***31,800***	***24,300***	***21,700***	19,700	19,400	17,000	18,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.063 B	ND	2.1 B	1.5 B	ND	1.8 B	ND	ND	ND
Zinc	2,000	14.2 B	40.5 B	69.1	67.6	65.1	30.5 B	15.5 B	6.0 B	ND	ND

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2018 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-21		MW-21		MW-21		MW-21	
Sample ID	Class GA	LMW-21	LMW-21F	LMW-21	LMW-21F	LMW-21	LMW-21F	LMW-21	LMW-21F
Laboratory ID	Ground	AC83866-029	AC83866-026	AC91321-002	AC91321-004	AD00074-018	AD00074-019	AD07749-035	AD07749-036
Sample Date	Water	3/19/15	3/19/15	5/10/16	5/10/16	9/13/17	9/13/17	11/12/18	11/12/18
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	1,400	ND	1,500	ND	2,500	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	2.1	ND	ND	ND	ND	ND
Barium	1,000	56.0	56.0	73.0	68.0	97.0	85.0	92.0	84.0
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	NC	12,000	12,000	12,000	13,000	15,000	15,000	16,000	18,000
Chromium	50	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	ND	ND	***2,500***	ND	***2,500***	***340***	***3,900***	***580***
Lead	25	ND	ND	4.2	ND	3.5	ND	7.0	ND
Magnesium	35,000	ND	ND	6,400	6,700	ND	ND	ND	5,000
Manganese	300	ND	ND	96.0	63.0	140	89.0	***320***	130
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND	7,200	7,100	6,700	7,100
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	15,000	15,000	17,000	19,000	***32,000***	***32,000***	***23,000***	***25,000***
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
E - Estimated value due to interference
N - Spike recovery outside control limits

BOLD/Italics - Exceeds criterion
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells
Groundwater Contaminant of Concern

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
NOVEMBER 2018 SAMPLING EVENT
COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-7	MW-7	MW-7	MW-17	MW-17	MW17	MW-2	MW-2	MW-2
Sample ID	Class GA	LMW-7	LMW-7F		LMW-17	LMW-17F		LMW-2	LMW-2F	
Laboratory ID	Ground	AD07749-011	AD07749-012		AD07749-027	AD07749-028		AD07749-001	AD07749-002	
Sample Date	Water	11/13/18	11/13/18		11/13/18	11/13/18		11/14/18	11/14/18	
Filtered/Unfiltered	Criteria	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved
Aluminum	NC	390	ND	NC	5,700	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	2.9	ND	NC	ND	ND	NC
Barium	1,000	ND	ND	NC	75.0	53.0	70.7%	ND	ND	NC
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	2.2	ND	NC	***25.0***	3.6	14.4%	ND	ND	NC
Calcium	NC	13,000	11,000	84.6%	31,000	32,000	103.2%	22,000	21,000	95.5%
Chromium	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cobalt	NC	ND	ND	NC	2.8	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC	ND	ND	NC
Iron	300	ND	ND	NC	***7,700***	***1,800***	23.4%	ND	ND	NC
Lead	25	ND	ND	NC	***49.0***	3.2	6.5%	ND	ND	NC
Magnesium	35,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Manganese	300	ND	ND	NC	***930***	***940***	101.1%	ND	ND	NC
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	6,500	6,400	98.5%	ND	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	18,000	16,000	88.9%	***23,000***	***24,000***	104.3%	14,000	14,000	100.0%
Thallium	0.50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	600	260	43.3%	ND	ND	NC
Turbidity (NTU)		2.7			94.8			10.3		

Notes:
E - Estimated value due to interference
B - Estimated value
ND - Not Detected
BOLD/Italics - Exceeds criterion

All values except turbidity are in micrograms per liter (µg/L)
% Dissolved = filtered conc. / unfiltered conc.
NC - No NYSDEC criterion or Not Calculable
Groundwater Contaminant of Concern

Upgradient Wells
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
NOVEMBER 2018 SAMPLING EVENT
COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-3	MW-3	MW-3	MW-4	MW-4	MW-4	MW-5	MW-5	MW-5
Sample ID	Class GA	LMW-3	LMW-3F		LMW-4	LMW-4F		LMW-5	LMW-5F	
Laboratory ID	Ground	AD07749-003	AD07749-004		AD07749-005	AD07749-006		AD07749-007	AD07749-008	
Sample Date	Water	11/14/18	11/14/18		11/14/18	11/14/18		11/14/18	11/14/18	
Filtered/Unfiltered	Criteria	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved
Aluminum	NC	730	ND	NC	1,400	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Barium	1,000	65	ND	NC	ND	ND	NC	ND	ND	NC
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	***5.0***	3.8	76.0%	***98.0***	***83.0***	84.7%	ND	ND	NC
Calcium	NC	17,000	16,000	94.1%	33,000	29,000	87.9%	20,000	20,000	100.0%
Chromium	50	***52.0***	ND	NC	***100***	ND	NC	ND	ND	NC
Cobalt	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Copper	200	58.0	ND	NC	110	56.0	50.9%	ND	ND	NC
Iron	300	***1,000***	ND	NC	***1,400***	***340***	24.3%	ND	ND	NC
Lead	25	12.0	ND	NC	15.0	3.1	20.7%	ND	ND	NC
Magnesium	35,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Manganese	300	ND	ND	NC	ND	ND	NC	ND	ND	NC
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	6,300	5,100	81.0%	7,800	7,700	98.7%
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	***25,000***	***23,000***	92.0%	9,600	8,300 J	86.5%	10,000	11,000	110.0%
Thallium	0.50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	88.0	63.0	71.6%	430	260	60.5%	ND	ND	NC
Turbidity (NTU)		15.9			28.4			22.7		

Notes:
E - Estimated value due to interference
B - Estimated value
ND - Not Detected
BOLD/Italics - Exceeds criterion

All values except turbidity are in micrograms per liter (µg/L)
% Dissolved = filtered conc. / unfiltered conc.
NC - No NYSDEC criterion or Not Calculable
Groundwater Contaminant of Concern

Upgradient Wells
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
NOVEMBER 2018 SAMPLING EVENT
COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-6	MW-6	MW-6	MW-18	MW-18	MW-18	MW-19	MW-19	MW-19
Sample ID	Class GA	LMW-6	LMW-6F		LMW-18	LMW-18F		LMW-19	LMW-19F	
Laboratory ID	Ground	AD07749-009	AD07749-010		AD07749-029	AD07749-030		AD07749-031	AD07749-032	
Sample Date	Water	11/14/18	11/14/18		11/13/18	11/13/18		11/13/18	11/13/18	
Filtered/Unfiltered	Criteria	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc.	Filtered conc. Q	Percent Dissolved
Aluminum	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Barium	1,000	ND	ND	NC	100	92.0	92.0%	ND	ND	NC
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Calcium	NC	9,800	9,500	96.9%	21,000	20,000	95.2%	11,000	11,000	100.0%
Chromium	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cobalt	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC	ND	ND	NC
Iron	300	ND	ND	NC	ND	ND	NC	ND	ND	NC
Lead	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Magnesium	35,000	ND	ND	NC	5,600	5,500	98.2%	ND	ND	NC
Manganese	300	ND	ND	NC	***1,200***	***940***	78%	ND	ND	NC
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	6,300	5,800	92.1%	ND	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	11,000	11,000	100.0%	***26,000***	***24,000***	92.3%	14,000	14,000	100.0%
Thallium	0.50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Turbidity (NTU)		6.6			5.2			0.0		

Notes:
E - Estimated value due to interference
B - Estimated value
ND - Not Detected
BOLD/Italics - Exceeds criterion

All values except turbidity are in micrograms per liter (µg/L)
% Dissolved = filtered conc. / unfiltered conc.
NC - No NYSDEC criterion or Not Calculable
Groundwater Contaminant of Concern

Upgradient Wells
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
NOVEMBER 2018 SAMPLING EVENT
COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-10	MW-10	MW-10	MW-16	MW-16	MW-16	MW-12	MW-12	MW-12
Sample ID	Class GA	LMW-10	LMW-10F		LMW-16	LMW-16F		LMW-12	LMW-12F	
Laboratory ID	Ground	AD07749-013	AD07749-014		AD07749-025	AD07749-026		AD07749-015	AD07749-018	
Sample Date	Water	11/12/18	11/12/18		11/12/18	11/12/18		11/12/18	11/12/18	
Filtered/Unfiltered	Criteria	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	filtered conc. Q	Percent Dissolved
Aluminum	NC	ND	ND	NC	2,900	400	13.8%	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Barium	1,000	ND	ND	NC	170	160	94.1%	ND	ND	NC
Beryllium	3	ND	ND	NC	1.0	ND	NC	ND	ND	NC
Cadmium	5	***57.0***	***60.0***	105.3%	***5.5***	***5.7***	103.6%	ND	ND	NC
Calcium	NC	29,000	27,000	93.1%	11,000	12,000	109.1%	45,000	46,000	102.2%
Chromium	50	***120***	***110***	91.7%	ND	ND	NC	ND	ND	NC
Cobalt	NC	ND	ND	NC	2.2	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC	ND	ND	NC
Iron	300	ND	ND	NC	***4,000***	ND	NC	***430***	***310***	72.1%
Lead	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Magnesium	35,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Manganese	300	ND	ND	NC	***1,200***	***1,100***	91.7%	82.0	82.0	100.0%
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	ND	ND	NC	5,300	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	13,000	12,000	92.3%	12,000	12,000	100.0%	***27,000***	***28,000***	103.7%
Thallium	0.50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Turbidity (NTU)		2.3			68.3			9.2		

Notes:
E - Estimated value due to interference
B - Estimated value
ND - Not Detected
BOLD/Italics - Exceeds criterion

All values except turbidity are in micrograms per liter (µg/L)
% Dissolved = filtered conc. / unfiltered conc.
NC - No NYSDEC criterion or Not Calculable
Groundwater Contaminant of Concern

Upgradient Wells
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
NOVEMBER 2018 SAMPLING EVENT
COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-14	MW-14	MW-14	MW-20	MW-20	MW-20	MW-21	MW-21	MW-21
Sample ID	Class GA	LMW-14	LMW-14F		LMW-20	LMW-20F		LMW-21	LMW-21F	
Laboratory ID	Ground	AD07749-021	AD07749-022		AD07749-033	AD07749-034		AD07749-035	AD07749-036	
Sample Date	Water	11/12/18	11/12/18		11/12/18	11/12/18		11/12/18	11/12/18	
Filtered/Unfiltered	Criteria	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc.	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved
Aluminum	NC	1,400	ND	NC	19,000	560	2.9%	2,500	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	11.0	ND	NC	ND	ND	NC
Barium	1,000	ND	ND	NC	150	ND	NC	92.0	84.0	91.3%
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	***9.1***	***8.6***	94.5%	ND	ND	NC	ND	ND	NC
Calcium	NC	12,000	11,000	91.7%	21,000	14,000	66.7%	16,000	18,000	112.5%
Chromium	50	***120***	***63.0***	53%	***72.0***	ND	NC	ND	ND	NC
Cobalt	NC	ND	ND	NC	10.0	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	63.0	ND	NC	ND	ND	NC
Iron	300	***1,600***	ND	NC	***34,000***	***570***	1.7%	***3,900***	***580***	14.9%
Lead	25	11.0	ND	NC	***27.0***	ND	NC	7.0	ND	NC
Magnesium	35,000	ND	ND	NC	10,000	6,900	69.0%	ND	5,000	NC
Manganese	300	58.0	52.0	89.7%	***1,100***	62.0	5.6%	***320***	130	40.6%
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	ND	ND	NC	6,700	7,100	106.0%
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	13,000	12,000	92.3%	19,000	18,000	94.7%	***23,000***	***25,000***	108.7%
Thallium	0.50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	57.0	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	340	ND	NC	ND	ND	NC
Turbidity (NTU)		27.2			84.6			54.8		

Notes:
E - Estimated value due to interference
B - Estimated value
ND - Not Detected
BOLD/Italics - Exceeds criterion

All values except turbidity are in micrograms per liter (µg/L)
% Dissolved = filtered conc. / unfiltered conc.
NC - No NYSDEC criterion or Not Calculable
Groundwater Contaminant of Concern

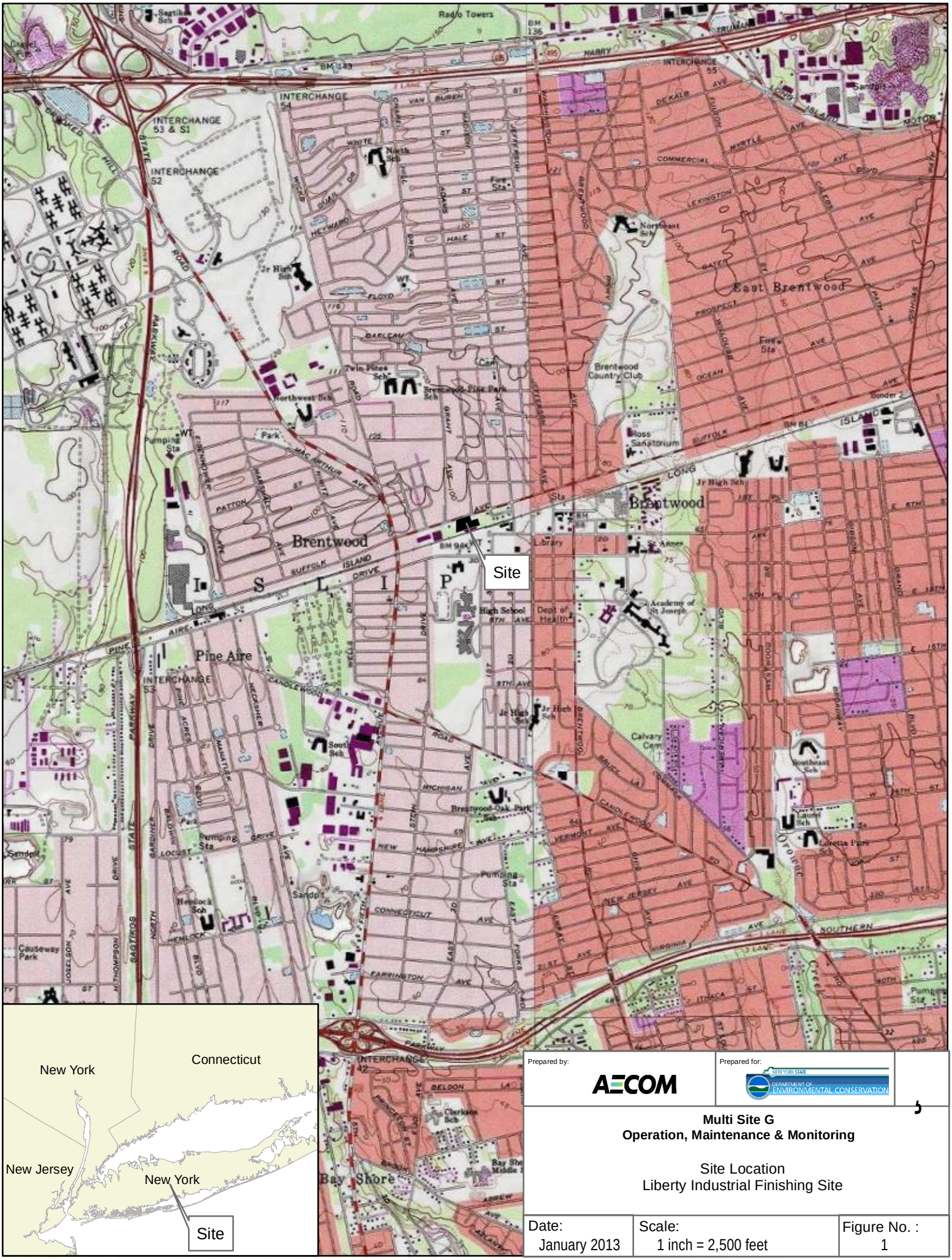
Upgradient Wells
Source Area Wells
Side Gradient Wells
Downgradient Wells
Sentinel Wells

TABLE 5
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
NOVEMBER 2018 (ROUND 11) SAMPLING EVENT
FIELD DUPLICATE DATA - TAL METALS IN GROUNDWATER

Sample Location	MW-14	MW-14	Precision	MW-14	MW-14	Precision
Sample ID	LMW-14	LMW-64	as	LMW-14F	LMW-64F	as
Laboratory ID	AD07749-021	AD07749-023	Relative	AD07749-022	AD07749-024	Relative
Sample Date	11/12/18	11/12/18	Percent	11/12/18	11/12/18	Percent
Filtered/Unfiltered	Unfiltered	Filtered	Difference	Filtered	Unfiltered	Difference
Metal	conc. Q	conc. Q	(RPD)	conc. Q	conc. Q	(RPD)
Aluminum	1400	2600	60.0%	ND	ND	NC
Antimony	ND	ND	NC	ND	ND	NC
Arsenic	ND	ND	NC	ND	ND	NC
Barium	ND	ND	NC	ND	ND	NC
Beryllium	ND	ND	NC	ND	ND	NC
Cadmium	9.1	8.8	3.4%	8.6	7.9	8.5%
Calcium	12,000	10,000	18.2%	11,000	9,900	10.5%
Chromium	120.0	160.0	28.6%	63	56	11.8%
Cobalt	ND	ND	NC	ND	ND	NC
Copper	ND	ND	NC	ND	ND	NC
Iron	1,600	2,700	51.2%	ND	ND	NC
Lead	11.0	21.0	62.5%	ND	ND	NC
Magnesium	ND	ND	NC	ND	ND	NC
Manganese	58	45	25.2%	52	44	16.7%
Mercury	ND	ND	NC	ND	ND	NC
Nickel	ND	ND	NC	ND	ND	NC
Potassium	ND	ND	NC	ND	ND	NC
Selenium	ND	ND	NC	ND	ND	NC
Silver	ND	ND	NC	ND	ND	NC
Sodium	13,000	13,000	0.0%	12,000	11,000	8.7%
Thallium	ND	ND	NC	ND	ND	NC
Vanadium	ND	ND	NC	ND	ND	NC
Zinc	ND	68.0	NC	ND	ND	NC

Notes:
All values in µg/L
NC - Not Calculable (analyte not detected in one or both analyses)
ND - Not Detected
Groundwater Contaminant of Concern

Figures



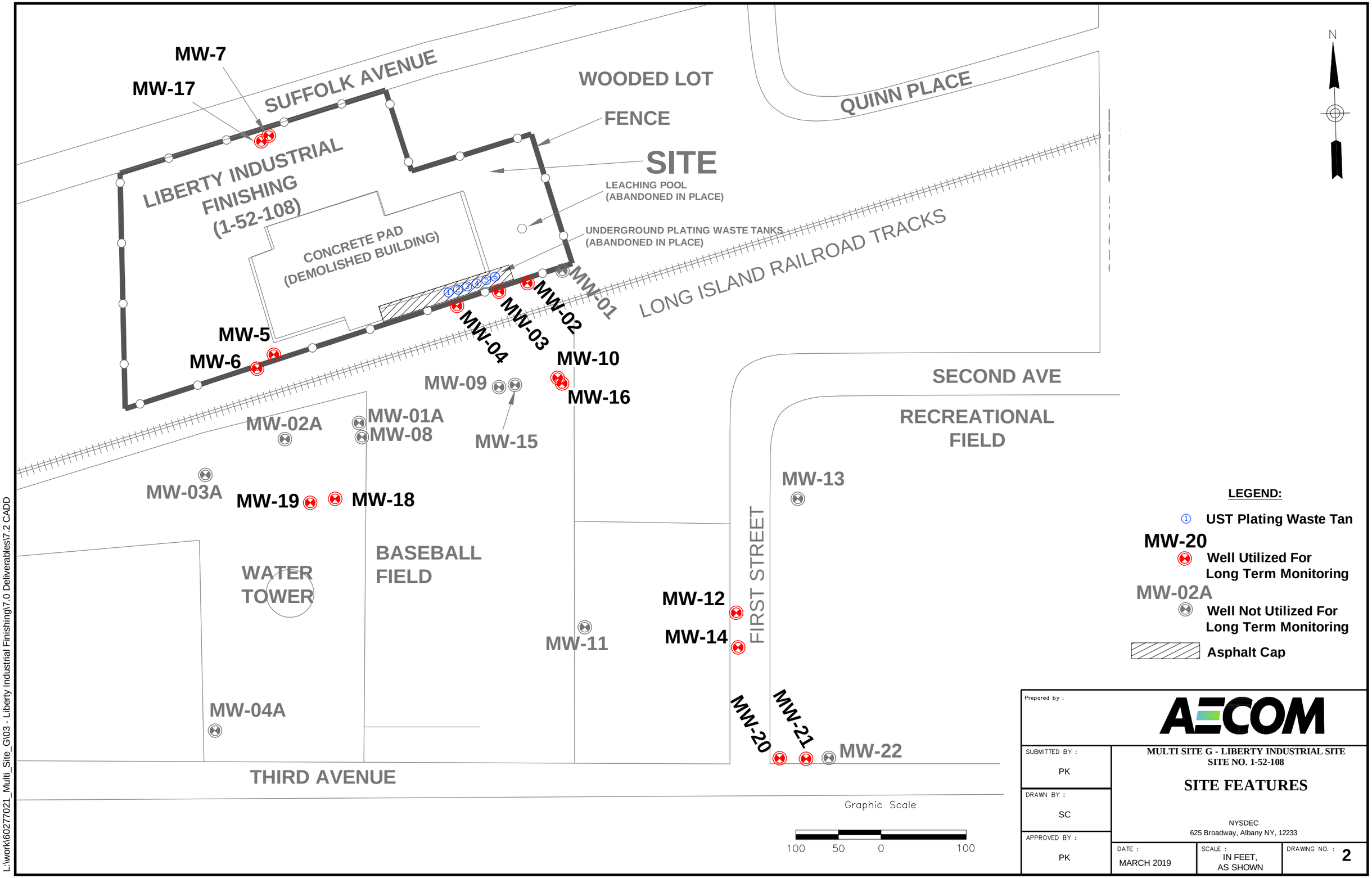
Prepared by: AECOM

Prepared for: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Multi Site G
Operation, Maintenance & Monitoring

Site Location
Liberty Industrial Finishing Site

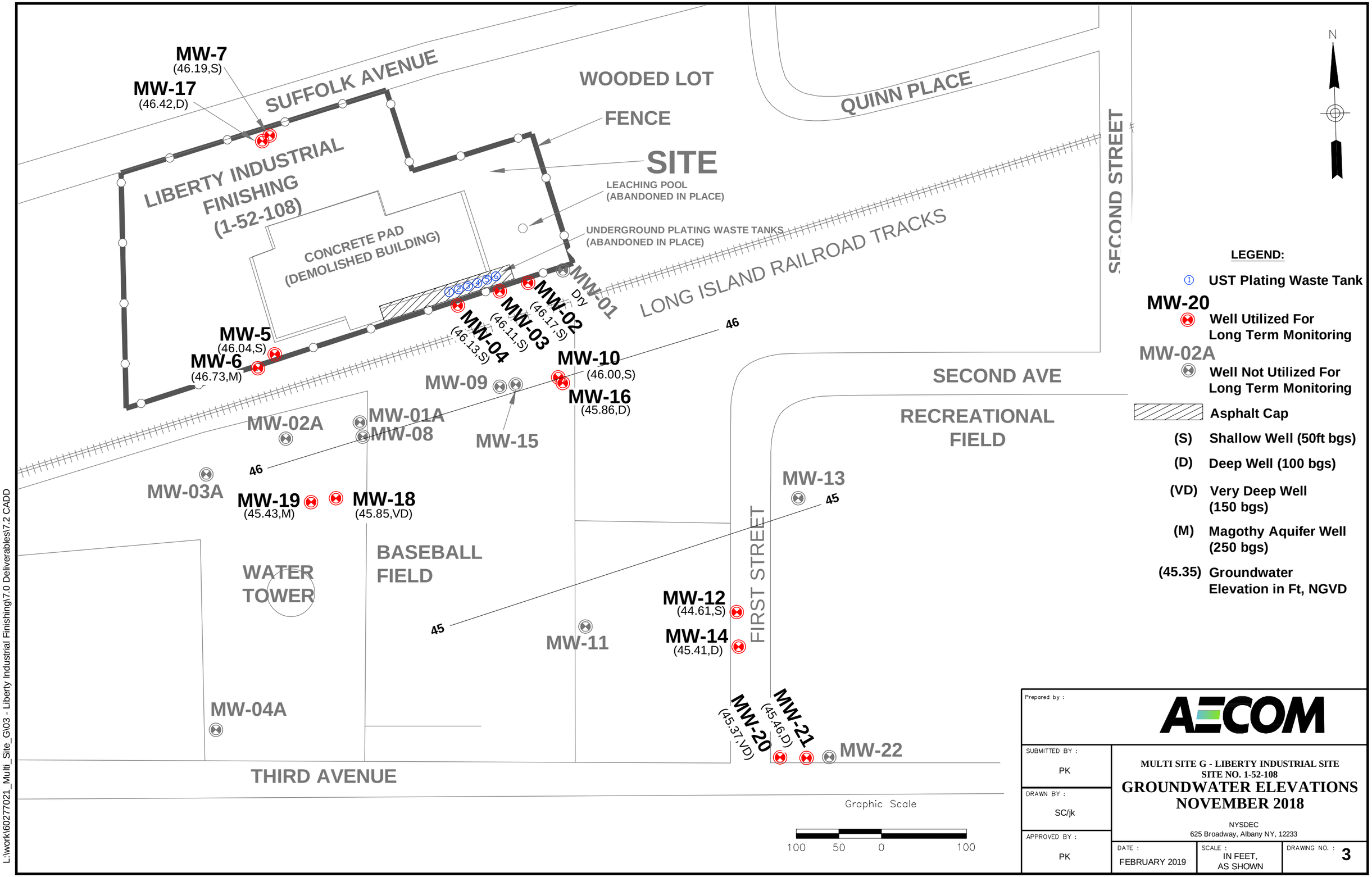
Date:	Scale:	Figure No. :
January 2013	1 inch = 2,500 feet	1



Prepared by : AECOM

SUBMITTED BY : PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108
DRAWN BY : SC	SITE FEATURES
APPROVED BY : PK	NYSDEC 625 Broadway, Albany NY, 12233
DATE : MARCH 2019	SCALE : IN FEET, AS SHOWN
DRAWING NO. : 2	

L:\work\60277021_Multi_Site_G\03 - Liberty Industrial Finishing\7.0 Deliverables\7.2 CADD



LEGEND:

- UST Plating Waste Tank
- MW-20 — Well Utilized For Long Term Monitoring
- MW-02A — Well Not Utilized For Long Term Monitoring
- Asphalt Cap
- (S) Shallow Well (50ft bgs)
- (D) Deep Well (100 bgs)
- (VD) Very Deep Well (150 bgs)
- (M) Magothy Aquifer Well (250 bgs)
- (45.35) Groundwater Elevation in Ft, NGVD

Prepared by : AECOM

SUBMITTED BY : PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108 GROUNDWATER ELEVATIONS NOVEMBER 2018 NYSDEC 625 Broadway, Albany NY, 12233
DRAWN BY : SC/jk	
APPROVED BY : PK	DATE : FEBRUARY 2019 / SCALE : IN FEET, AS SHOWN / DRAWING NO. : 3

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FIGURE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
GROUNDWATER HYDROGRAPH

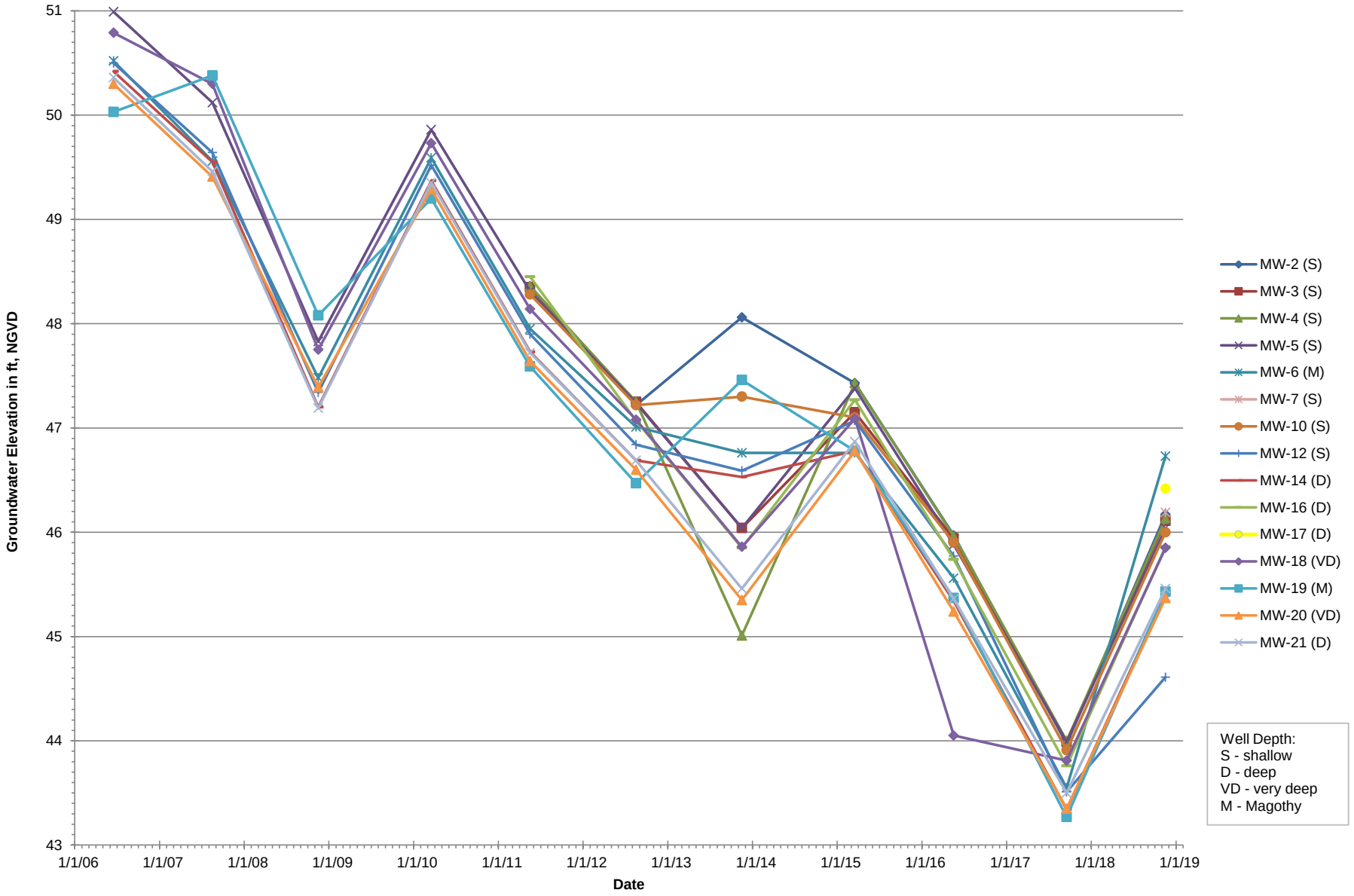


Figure 4A
Liberty Industrial Finishing Site (1-52-108)
Groundwater Hydrograph - Shallow Wells

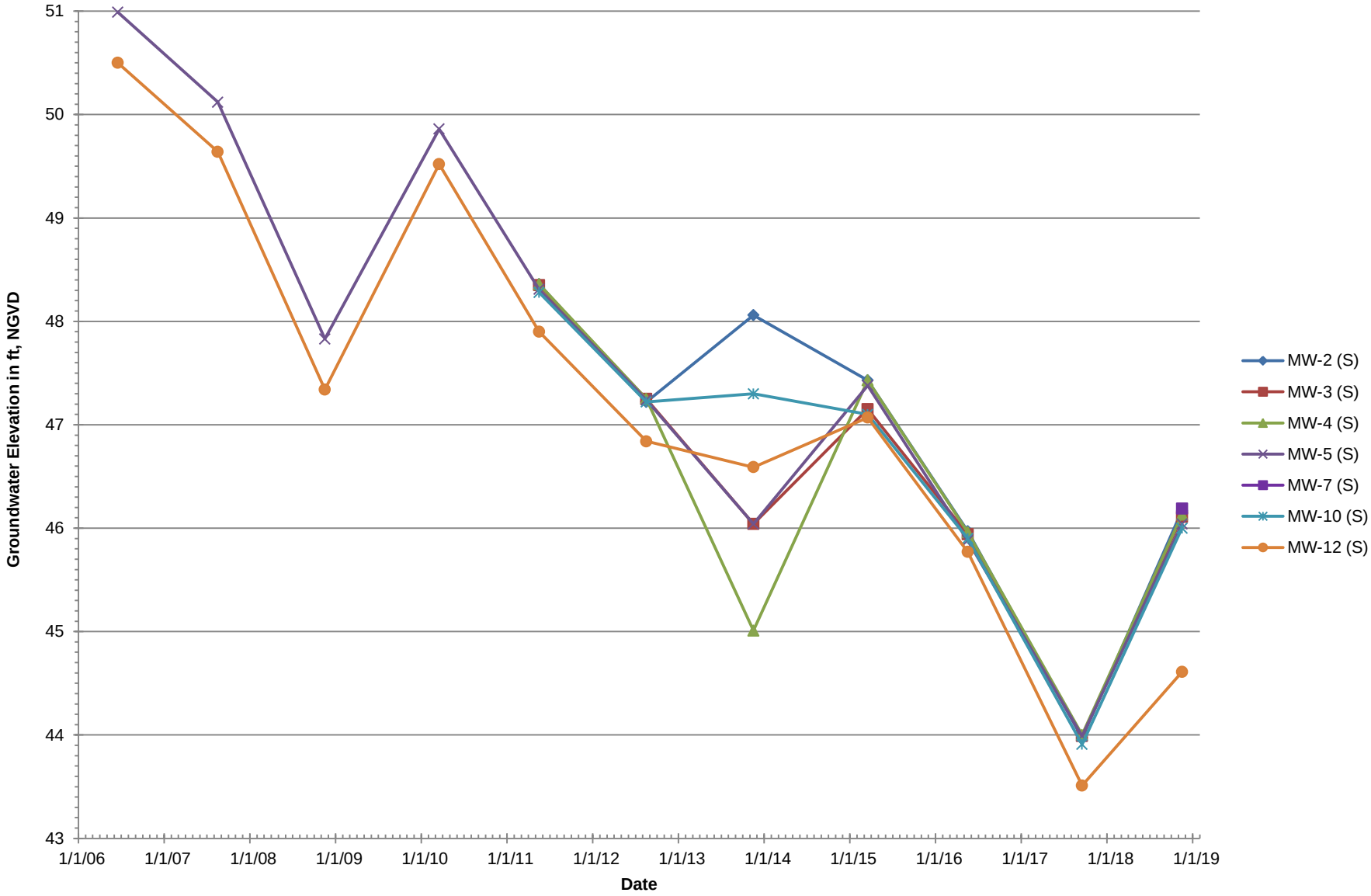


Figure 4B
LIberty Industrial Finishing Site (1-52-108)
Groundwater Hydrograph - Deep Wells

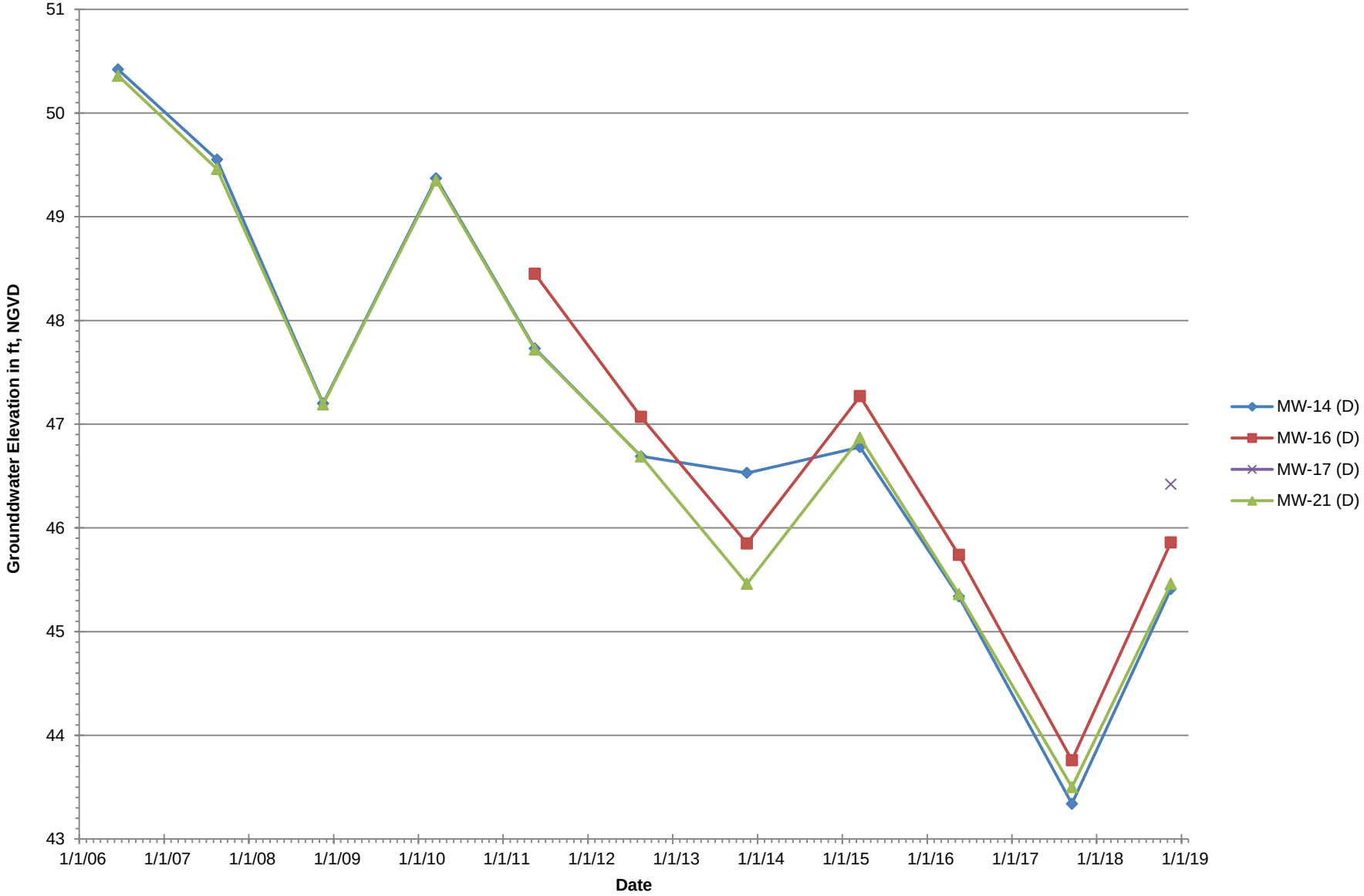


Figure 4C
Liberty Industrial Finishing Site (1-52-108)
Groundwater Hydrograph, Very Deep Wells

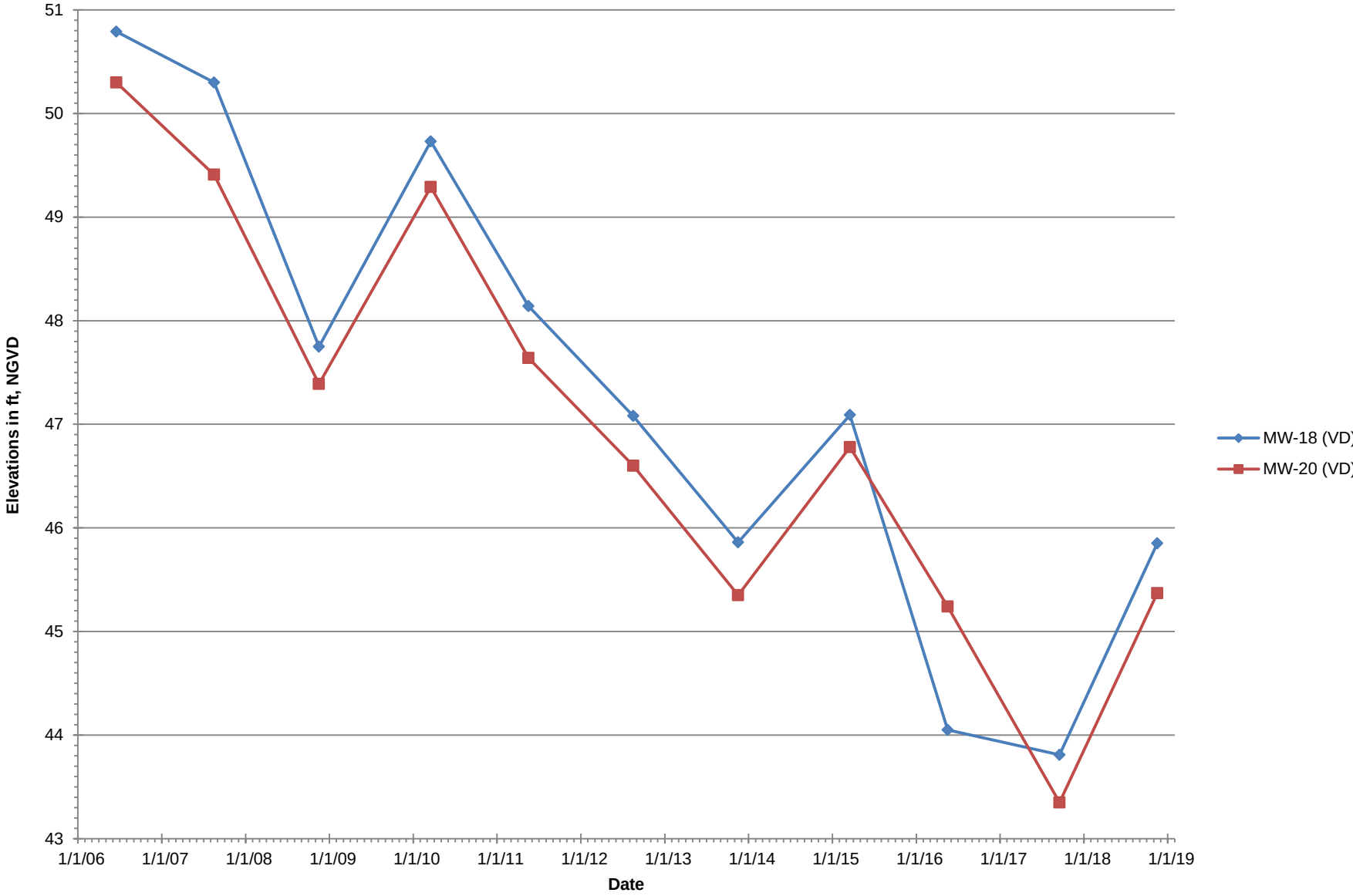
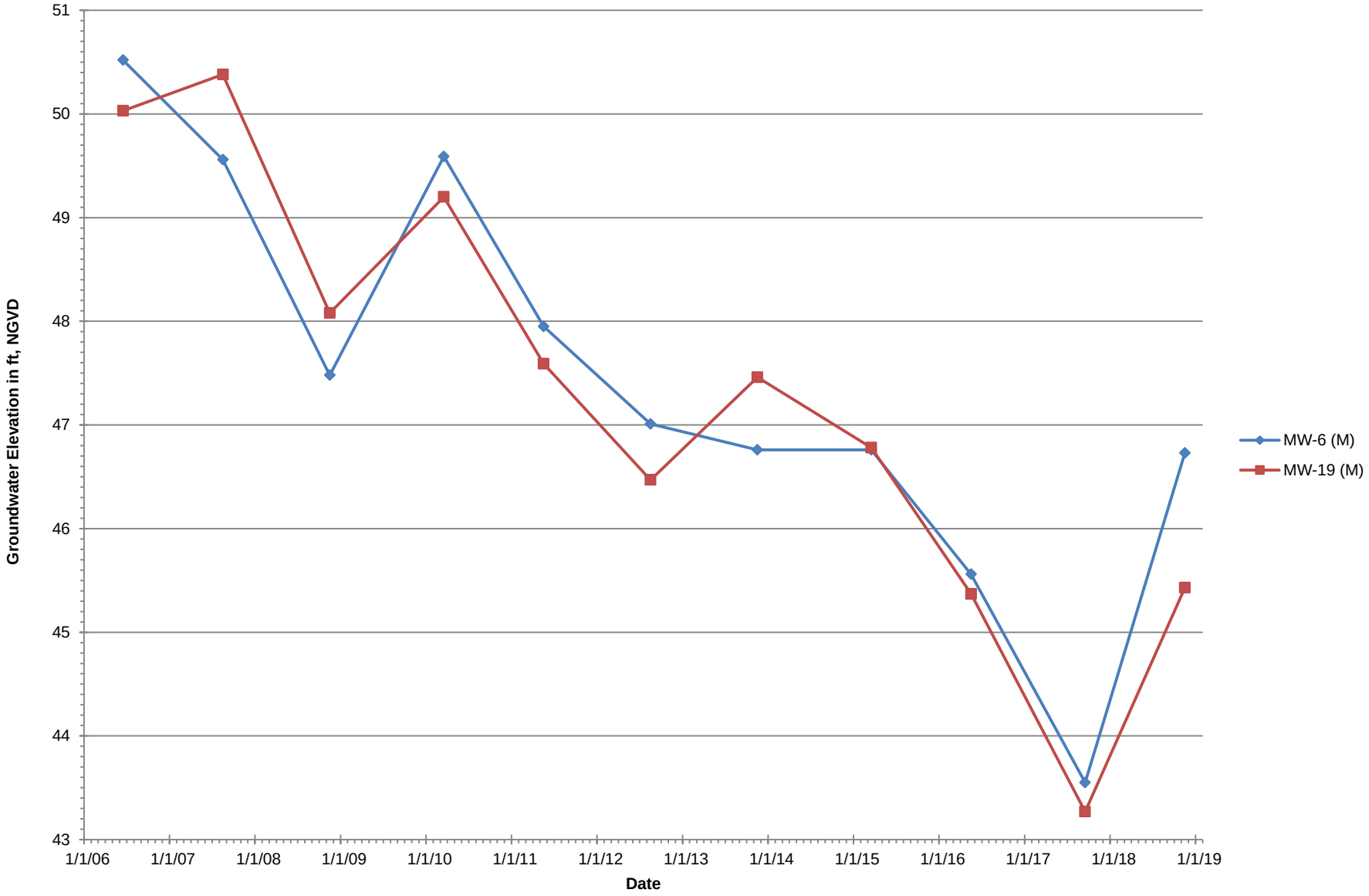


Figure 4D
Liberty Industrial Finishing Site (1-52-108)
Groundwater Hydrograph, Magothy Wells



Compound	NYSDEC Criteria
Antimony	3
Cadmium	5
Chromium	50
Copper	200
Iron	300
Lead	25
Manganese	300
Selenium	10
Sodium	20,000
Thallium	0.50

LEGEND:

- UST Plating Waste Tank
- MW-20 — Well Utilized For Long Term Monitoring
- Well Not Utilized For Long Term Monitoring
- (S) Shallow Well (50ft bgs)
- (D) Deep Well (100 bgs)
- (VD) Very Deep Well (150 bgs)
- (M) Magothy Aquifer Well (250 bg
- Asphalt Cap
- Source Area Wells
- Side Gradient Wells
- Downgradient Wells
- Sentinel Wells
- F Filtered
- ND Not Detected
- U Not Filtered
- *8.5* Concentration Exceeds the Class GA Criteria
- Exceedance Only All Values are in ug/L

MW-7 (S)	
Nov-18	Nov-18
U	F
No Exceedances	

	MW-4 (S)	
	Nov-18	Nov-18
Compound	U	F
Cadmium	***98.0***	***83.0***
Chromium	***100***	ND
Iron	***1,400***	***340***

	MW-3 (S)	
	Nov-18	Nov-18
Compound	U	F
Cadmium	***5.0***	3.8
Chromium	***52.0***	ND
Iron	***1,000***	ND
Sodium	***25,000***	***23,000***

MW-2 (S)	
Nov-18	Nov-18
U	F
No Exceedances	

	MW-10 (S)	
	Nov-18	Nov-18
Compound	U	F
Cadmium	***57.0***	***60.0***
Chromium	***120***	***110***

	MW-17 (D)	
	Nov-18	Nov-18
Compound	U	F
Cadmium	***25.0***	3.6
Iron	***7,700***	***1,800***
Lead	***49.0***	3.2
Manganese	***930***	***940***
Sodium	***23,000***	***24,000***

	MW-16 (D)	
	Nov-18	Nov-18
Compound	U	F
Cadmium	***5.5***	***5.7***
Iron	***4,000***	ND
Manganese	***1,200***	***1,100***

MW-5 (S)	
Nov-18	Nov-18
U	F
No Exceedances	

	MW-12 (S)	
	Nov-18	Nov-18
Compound	U	F
Iron	***430***	***310***
Sodium	***27,000***	***28,000***

MW-6 (M)	
Nov-18	Nov-18
U	F
No Exceedances	

	MW-14 (D)	
	Nov-18	Nov-18
Compound	U	F
Cadmium	***9.1***	***8.6***
Chromium	***120***	***63.0***
Iron	***1,600***	ND

MW-19 (M)	
Nov-18	Nov-18
U	F
No Exceedances	

	MW-18 (VD)	
	Nov-18	Nov-18
Compound	U	F
Manganese	***1,200***	***940***
Sodium	***26,000***	***24,000***

	MW-21 (D)	
	Nov-18	Nov-18
Compound	U	F
Iron	***3,900***	***580***
Manganese	***320***	130
Sodium	***23,000***	***25,000***

	MW-20 (VD)	
	Nov-18	Nov-18
Compound	U	F
Chromium	***72.0***	ND
Iron	***34,000***	***570***
Lead	***27.0***	ND
Manganese	***1,100***	62.0

SUFFOLK AVENUE
WOODED LOT
FENCE
QUINN PLACE
SITE
LEACHING POOL (ABANDONED IN PLACE)
UNDERGROUND PLATING WASTE TANKS (ABANDONED IN PLACE)
LIBERTY INDUSTRIAL FINISHING (1-52-108)
CONCRETE PAD (DEMOLISHED BUILDING)
GAS STATION
LONG ISLAND RAILROAD TRACKS
SECOND STREET
SECOND AVE
RECREATIONAL FIELD
WOODED LOT
MW-13
FIRST STREET
BASEBALL FIELD
WATER TOWER
BASEBALL FIELD
MW-11
MW-12
MW-14
RECREATION DEPARTMENT
MW-04A
MW-20
MW-21
MW-22
THIRD AVENUE
MW-7
MW-17
MW-5
MW-6
MW-01
MW-02
MW-03
MW-04
MW-10
MW-16
MW-09
MW-02A
MW-01A
MW-08
MW-15
MW-03A
MW-19
MW-18

Graphic Scale
200 100 0 200

Prepared by : AECOM

SUBMITTED BY : PK
DRAWN BY : SC/jk
APPROVED BY : PK

MULTI SITE G - LIBERTY INDUSTRIAL SITE
SITE NO. 1-52-108

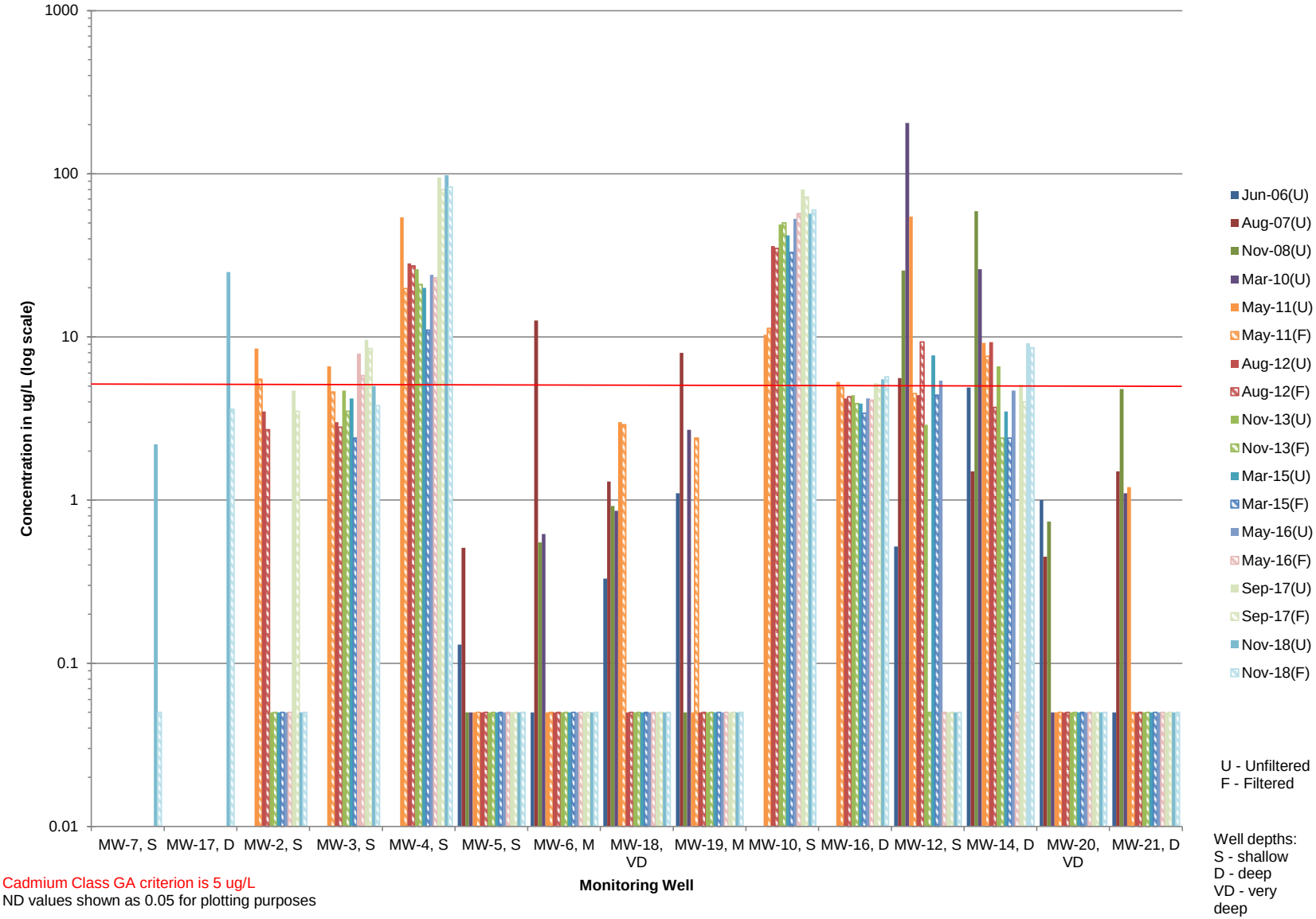
SUMMARY OF TAL METALS IN GROUNDWATER NOVEMBER 2018

NYSDEC
625 Broadway, Albany NY, 12233

DATE : FEBRUARY 2019
SCALE : IN FEET, AS SHOWN
DRAWING NO. : 5

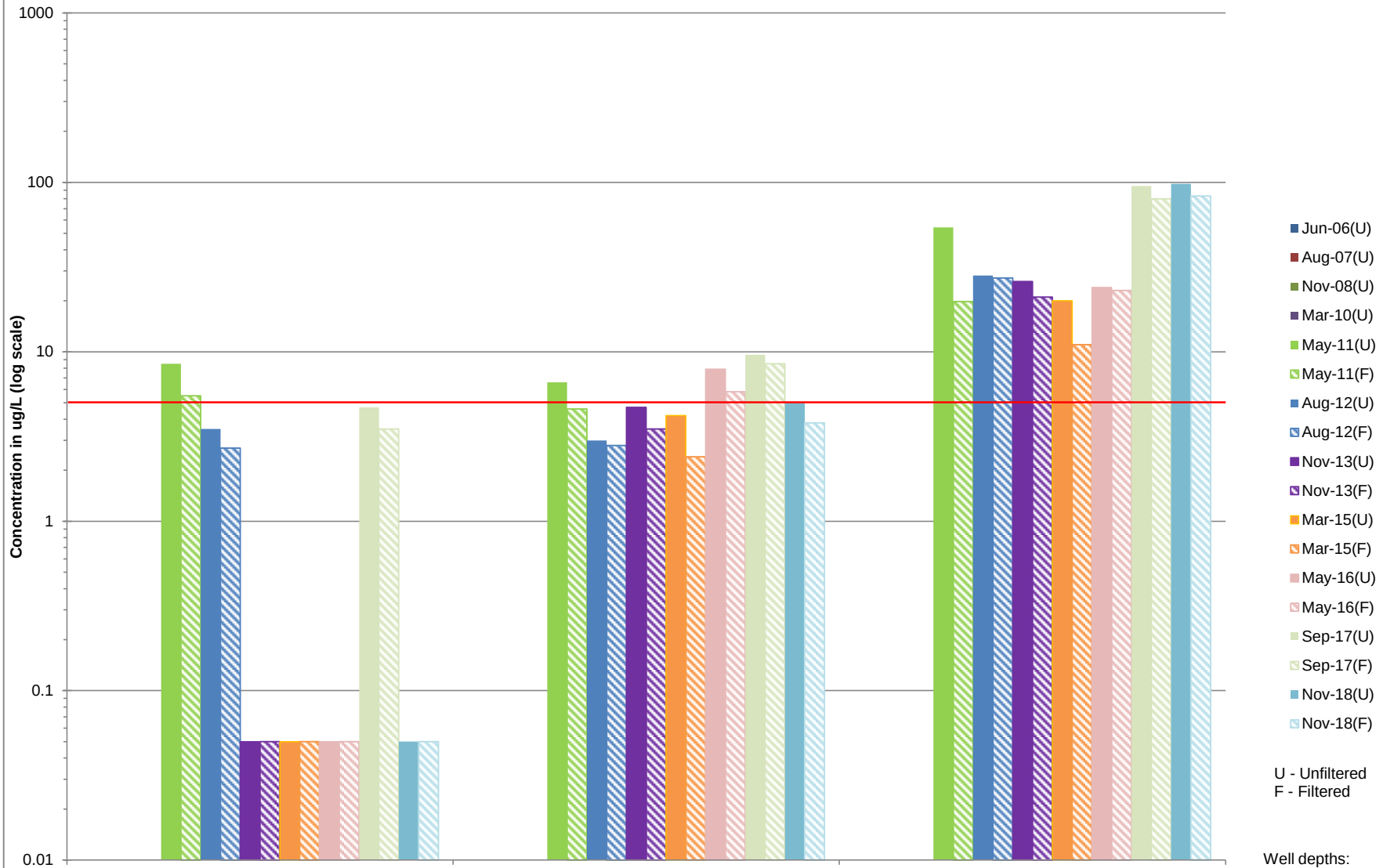
:\work\60277021_Multi_Site_G\03 - Liberty Industrial Finishing\7.0 Deliverables\7.2 CADD

FIGURE 6
CADMIUM CONCENTRATIONS IN SELECTED MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)



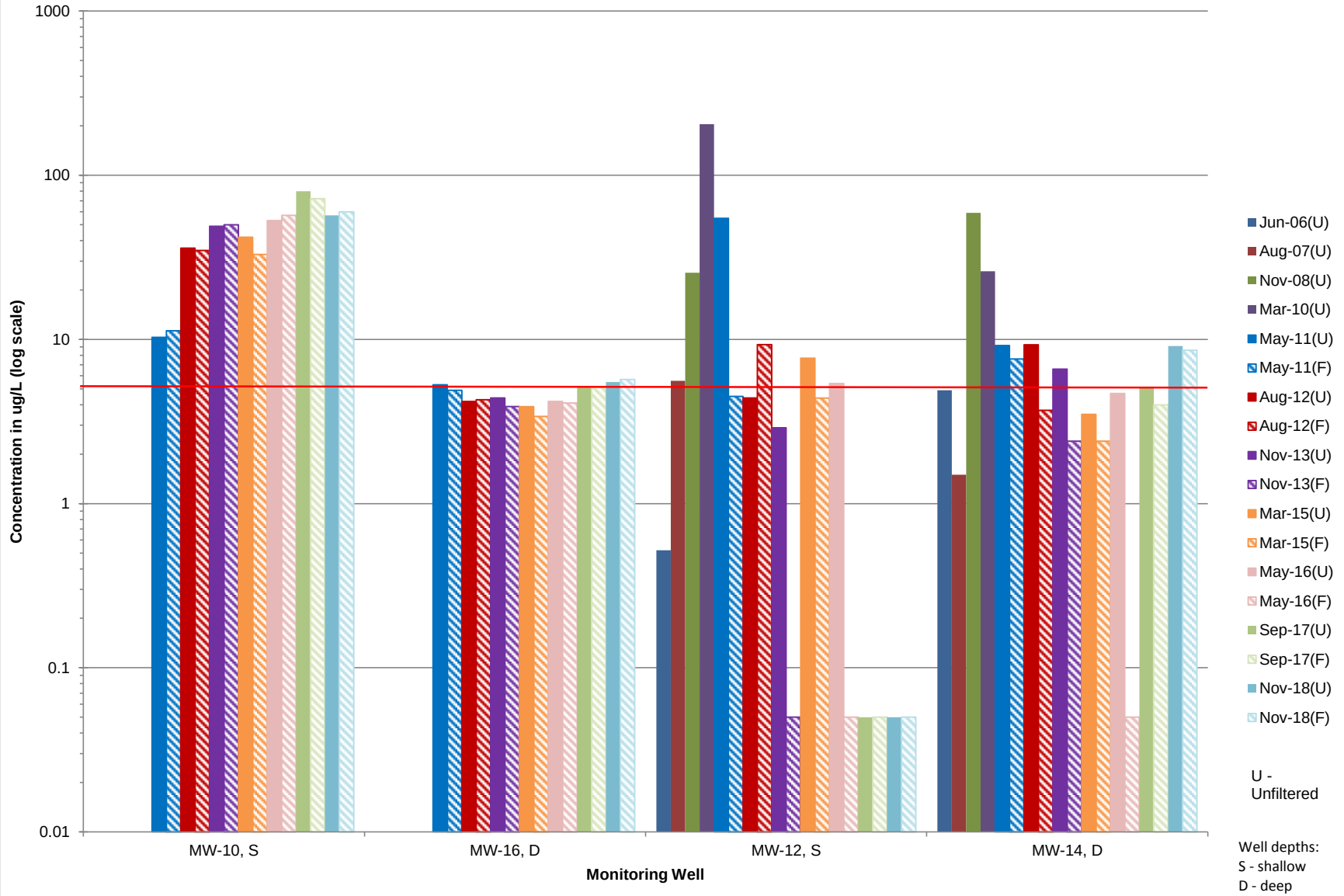
Cadmium Class GA criterion is 5 ug/L
ND values shown as 0.05 for plotting purposes

FIGURE 6A
CADMIUM CONCENTATIONS IN SOURCE AREA MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)



Cadmium Class GA criterion is 5 ug/L
ND values shown as 0.05 for plotting purposes

FIGURE 6B
CADMIUM CONCENTRATIONS IN DOWNGRADIENT MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING (1-52-108)



Cadmium Class GA criterion is 5 ug/L
ND values set to 0.05 ug/L for plotting purposes

MW-7
MW-17
SUFFOLK AVENUE
WOODED LOT
FENCE
SITE
LIBERTY INDUSTRIAL FINISHING (1-52-108)
LEACHING POOL (ABANDONED IN PLACE)
UNDERGROUND PLATING WASTE TANKS (ABANDONED IN PLACE)
CONCRETE PAD (DEMOLISHED BUILDING)
QUINN PLACE
SECOND STREET
LONG ISLAND RAILROAD TRACKS
MW-01
MW-02 (2.7,S)
MW-03 (2.8,S)
MW-04 (27.3,S)
MW-5 (ND,S)
MW-6 (ND,M)
MW-10 (34.9,S)
MW-16 (4.3,D)
MW-09
MW-15
SECOND AVE
RECREATIONAL FIELD
MW-02A
MW-01A
MW-08
MW-03A
MW-19 (ND,M)
MW-18 (ND,VD)
MW-13
BASEBALL FIELD
WATER TOWER
10
5
(9.3, S)
MW-12
MW-11
MW-14 (3.7, D)
FIRST STREET
MW-04A
MW-21 (ND, D)
MW-20 (ND, VD)
THIRD AVENUE

Graphic Scale
100 50 0 100

N

LEGEND:

- UST Plating Waste Tank
- **MW-20** — Well Utilized For Long Term Monitoring
- **MW-02A** — Well Not Utilized For Long Term Monitoring
- Asphalt Cap
- (S) Shallow Well (50ft bgs)
- (D) Deep Well (100 bgs)
- (VD) Very Deep Well (150 bgs)
- ND Not Detected
- 5 — Cadmium Isoconcentration line, contour interval is 5ug/L. Dashed where inferred. Contours based on shallow (S) well concentrations
- (9.3) Filtered Cadmium Concentration in ug/L

Prepared by : AECOM

SUBMITTED BY : PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108 CADMIUM ISOCONCENTRATION MAP SHALLOW WELLS August 2012 NYSDEC 625 Broadway, Albany NY, 12233
DRAWN BY : SC	
APPROVED BY : PK	DATE : NOV. 2012 / SCALE : IN FEET, AS SHOWN / DRAWING NO. : 7

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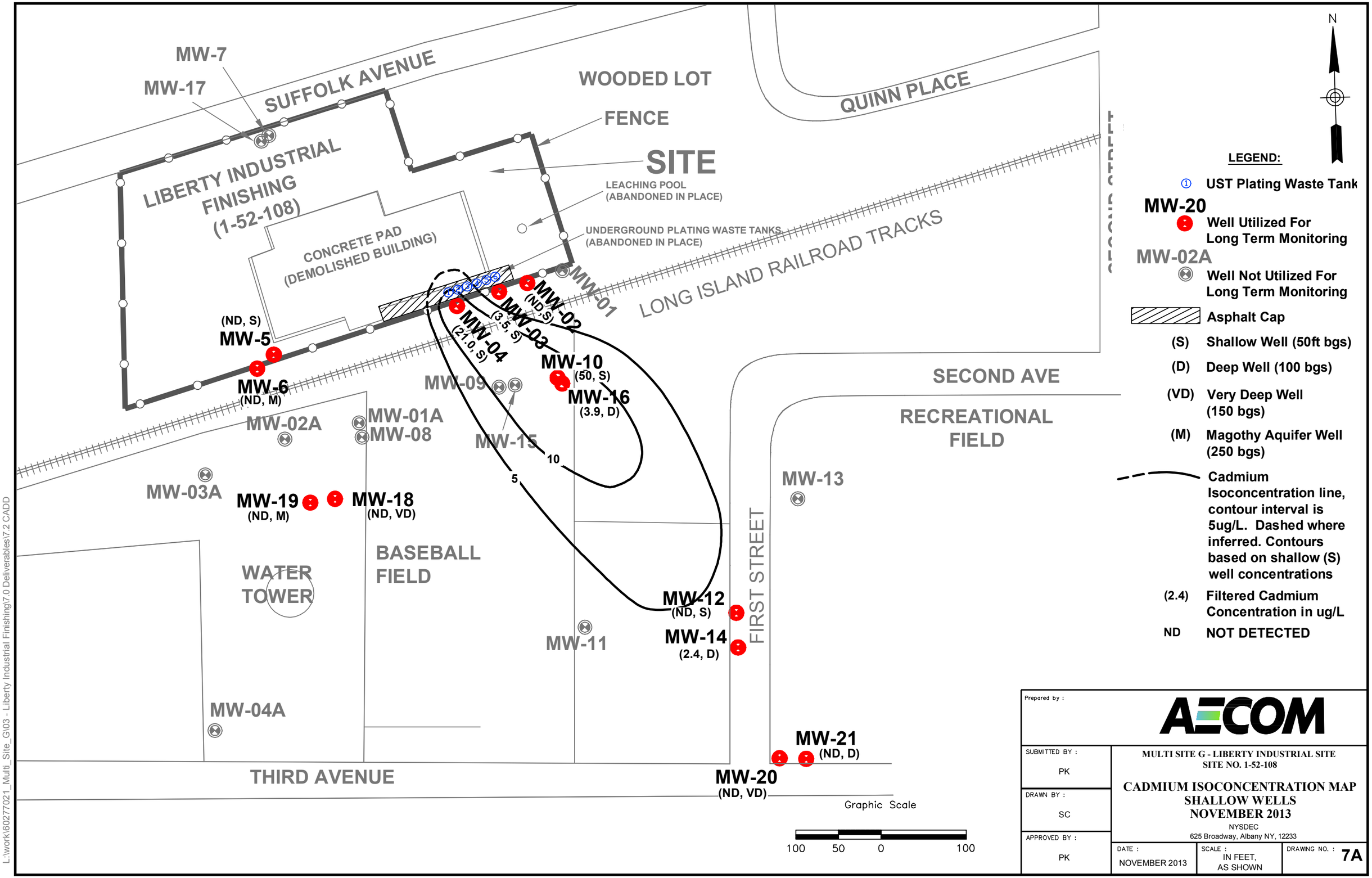
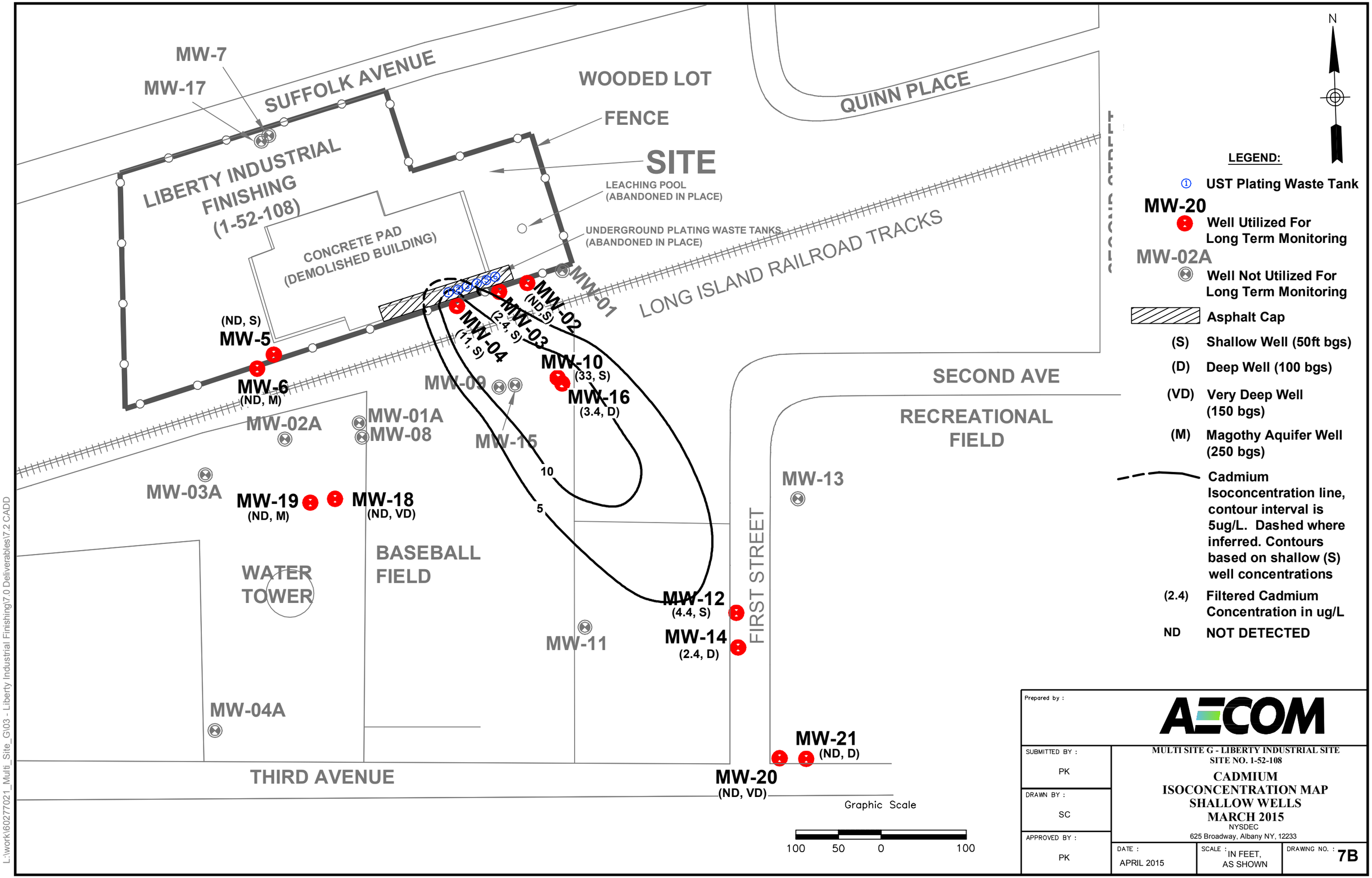


Prepared by : AECOM

SUBMITTED BY : PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108
DRAWN BY : SC	CADMIUM ISOCONCENTRATION MAP SHALLOW WELLS NOVEMBER 2013
APPROVED BY : PK	NYSDEC 625 Broadway, Albany NY, 12233
DATE : NOVEMBER 2013	SCALE : IN FEET, AS SHOWN
DRAWING NO. : 7A	

L:\work\60277021_Multi_Site_G\03 - Liberty Industrial Finishing\7.0 Deliverables\7.2 CADD



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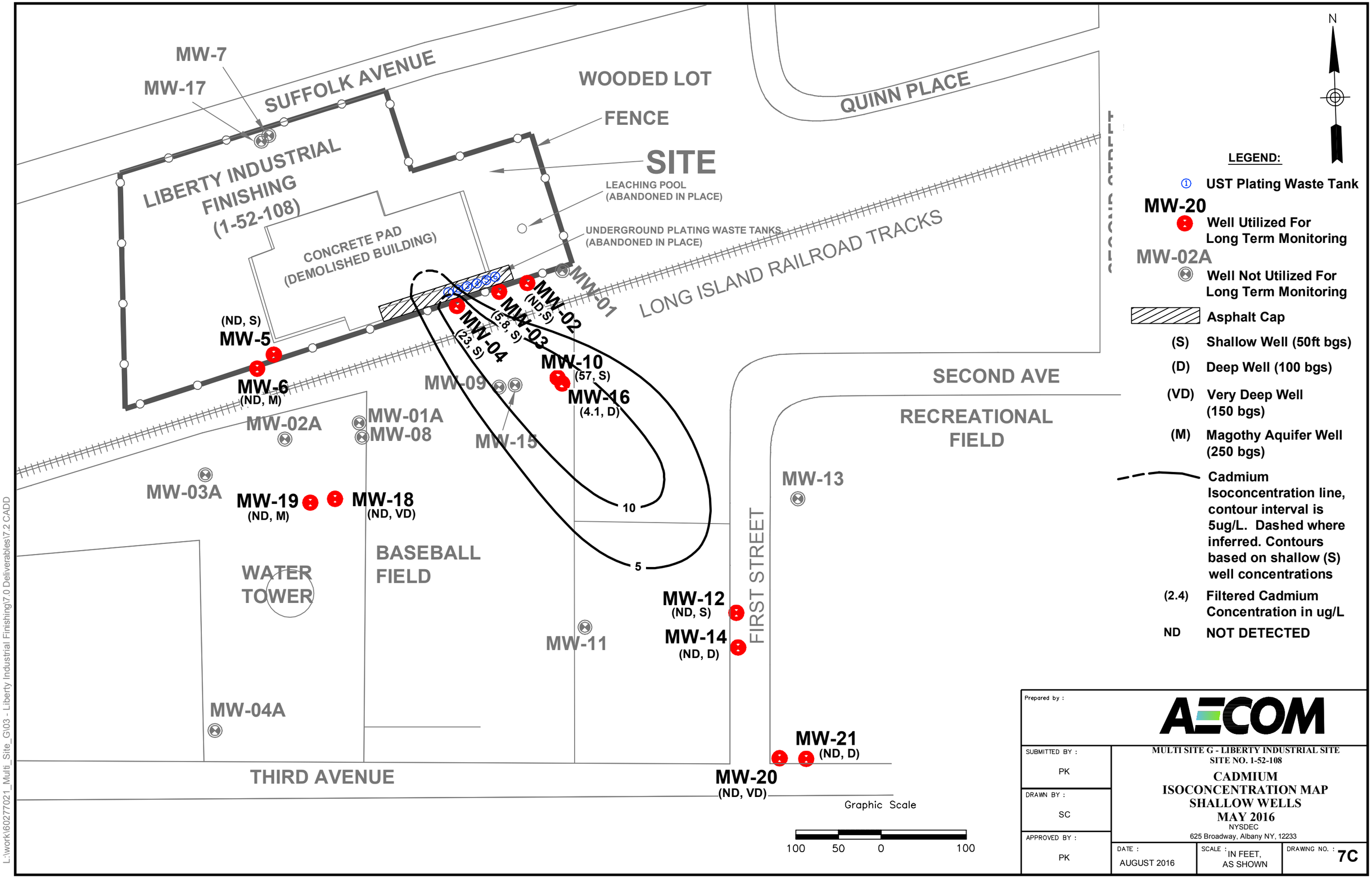
Prepared by : AECOM

SUBMITTED BY : PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108 CADMIUM ISOCONCENTRATION MAP SHALLOW WELLS MARCH 2015 NYSDEC 625 Broadway, Albany NY, 12233
DRAWN BY : SC	
APPROVED BY : PK	DATE : APRIL 2015 / SCALE : IN FEET, AS SHOWN / DRAWING NO. : 7B



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Prepared by : AECOM

SUBMITTED BY : PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108 CADMIUM ISOCONCENTRATION MAP SHALLOW WELLS MAY 2016 NYSDEC 625 Broadway, Albany NY, 12233
DRAWN BY : SC	
APPROVED BY : PK	DATE : AUGUST 2016 / SCALE : IN FEET, AS SHOWN / DRAWING NO. : 7C

MW-7
MW-17
SUFFOLK AVENUE
WOODED LOT
FENCE
QUINN PLACE
SECOND STREET
SITE
LIBERTY INDUSTRIAL FINISHING (1-52-108)
LEACHING POOL (ABANDONED IN PLACE)
CONCRETE PAD (DEMOLISHED BUILDING)
UNDERGROUND PLATING WASTE TANKS (ABANDONED IN PLACE)
MW-01
LONG ISLAND RAILROAD TRACKS
MW-02 (3.2, S)
MW-03 (6.5, S)
MW-04 (80, S)
(ND, S)
MW-5
MW-6 (ND, M)
MW-10 (72, S)
MW-16 (5.1, D)
MW-09
MW-15
MW-01A
MW-08
MW-02A
MW-03A
MW-19 (ND, M)
MW-18 (ND, VD)
10
5
WATER TOWER
BASEBALL FIELD
MW-12 (ND, S)
MW-14 (4.0, D)
MW-11
FIRST STREET
SECOND AVE
RECREATIONAL FIELD
MW-13
MW-04A
MW-21 (ND, D)
MW-20 (ND, VD)
THIRD AVENUE
Graphic Scale
100 50 0 100
N

LEGEND:

- UST Plating Waste Tank
- MW-20 — Well Utilized For Long Term Monitoring
- MW-02A — Well Not Utilized For Long Term Monitoring
- Asphalt Cap
- (S) Shallow Well (50ft bgs)
- (D) Deep Well (100 bgs)
- (VD) Very Deep Well (150 bgs)
- (M) Magothy Aquifer Well (250 bgs)
- Cadmium Isoconcentration line, contour interval is 5ug/L. Dashed where inferred. Contours based on shallow (S) well concentrations
- (2.4) Filtered Cadmium Concentration in ug/L
- ND NOT DETECTED

Prepared by : AECOM

SUBMITTED BY : PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108 CADMIUM ISOCONCENTRATION MAP SHALLOW WELLS SEPTEMBER 2017 NYSDEC 625 Broadway, Albany NY, 12233
DRAWN BY : SC	
APPROVED BY : PK	DATE : JANUARY 2018 / SCALE : IN FEET, AS SHOWN / DRAWING NO. : 7D

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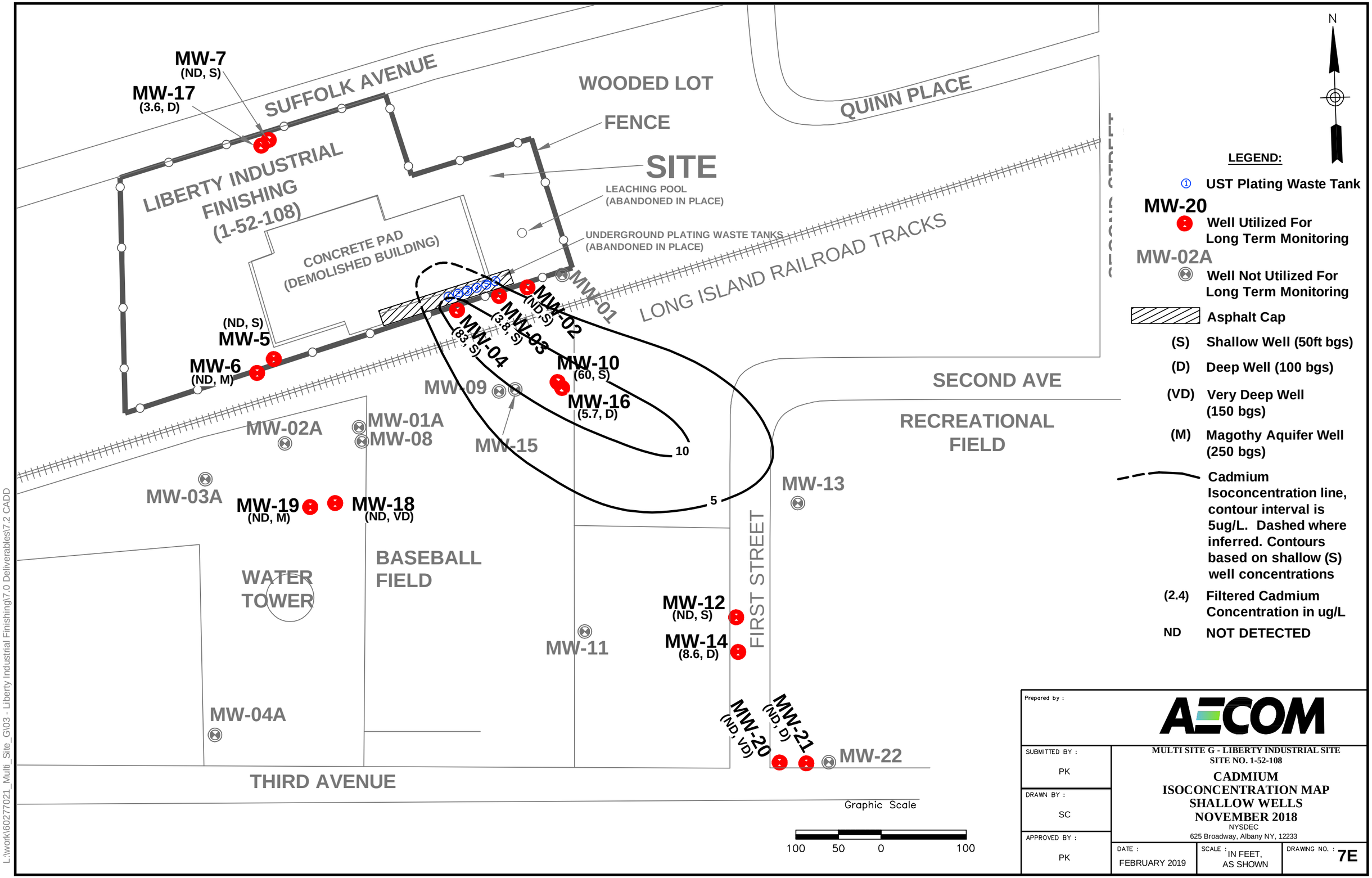

Prepared by : AECOM

SUBMITTED BY : PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108 CADMIUM ISOCONCENTRATION MAP SHALLOW WELLS NOVEMBER 2018 NYSDEC 625 Broadway, Albany NY, 12233
DRAWN BY : SC	
APPROVED BY : PK	DATE : FEBRUARY 2019 / SCALE : IN FEET, AS SHOWN / DRAWING NO. : 7E

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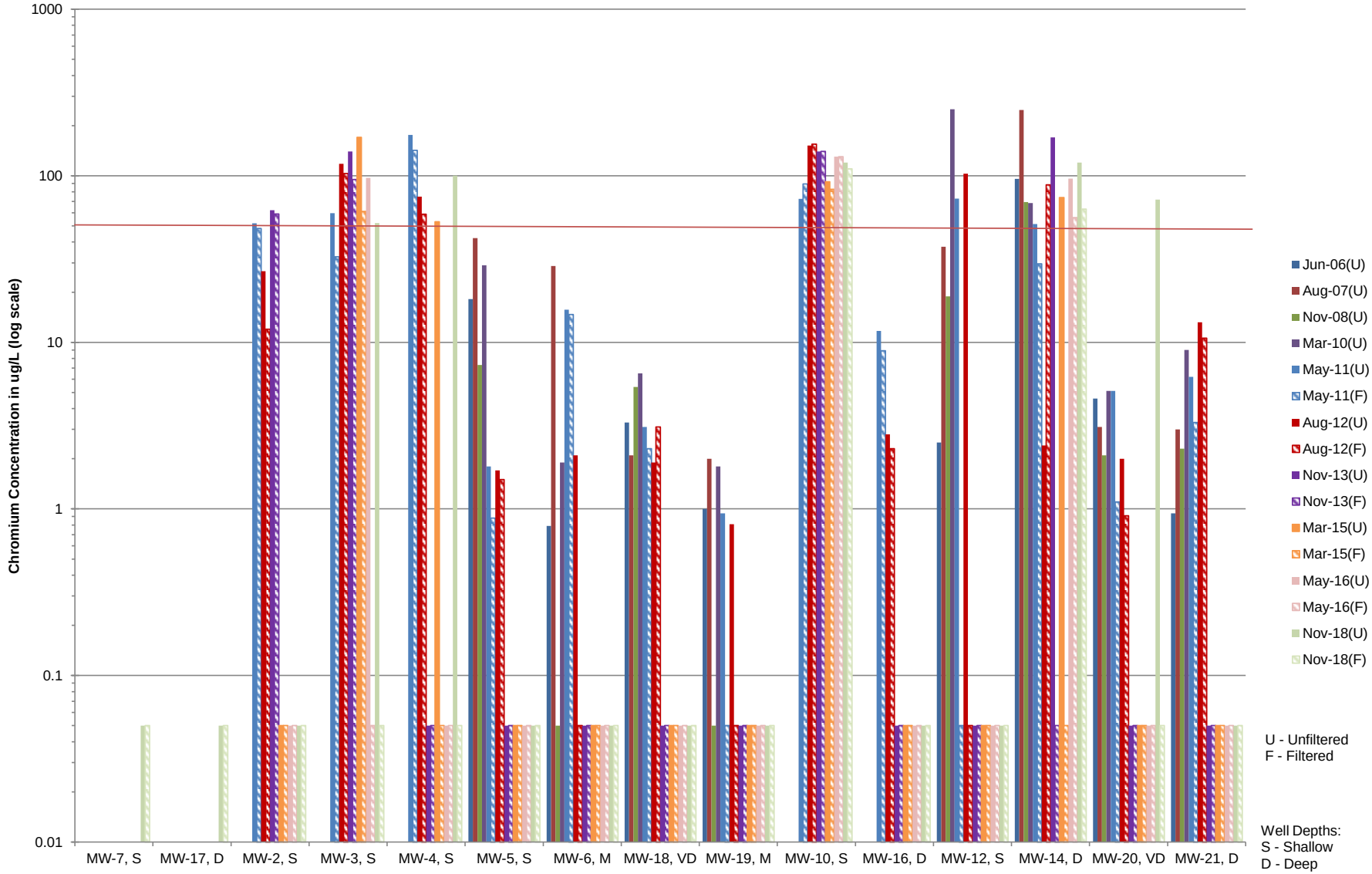
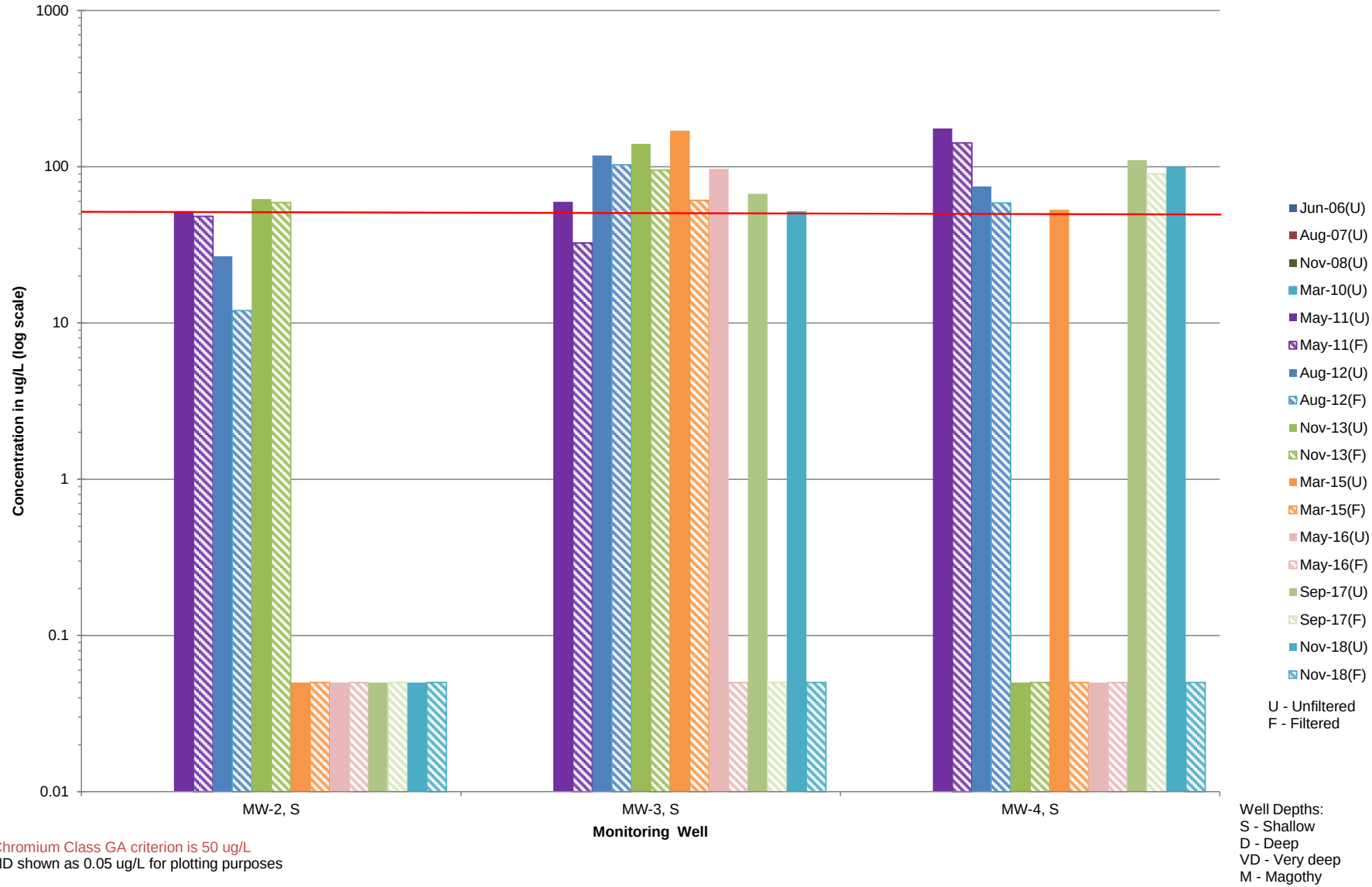
FIGURE 8
CHROMIUM CONCENTRATIONS IN SELECTED MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING (1-52-108)



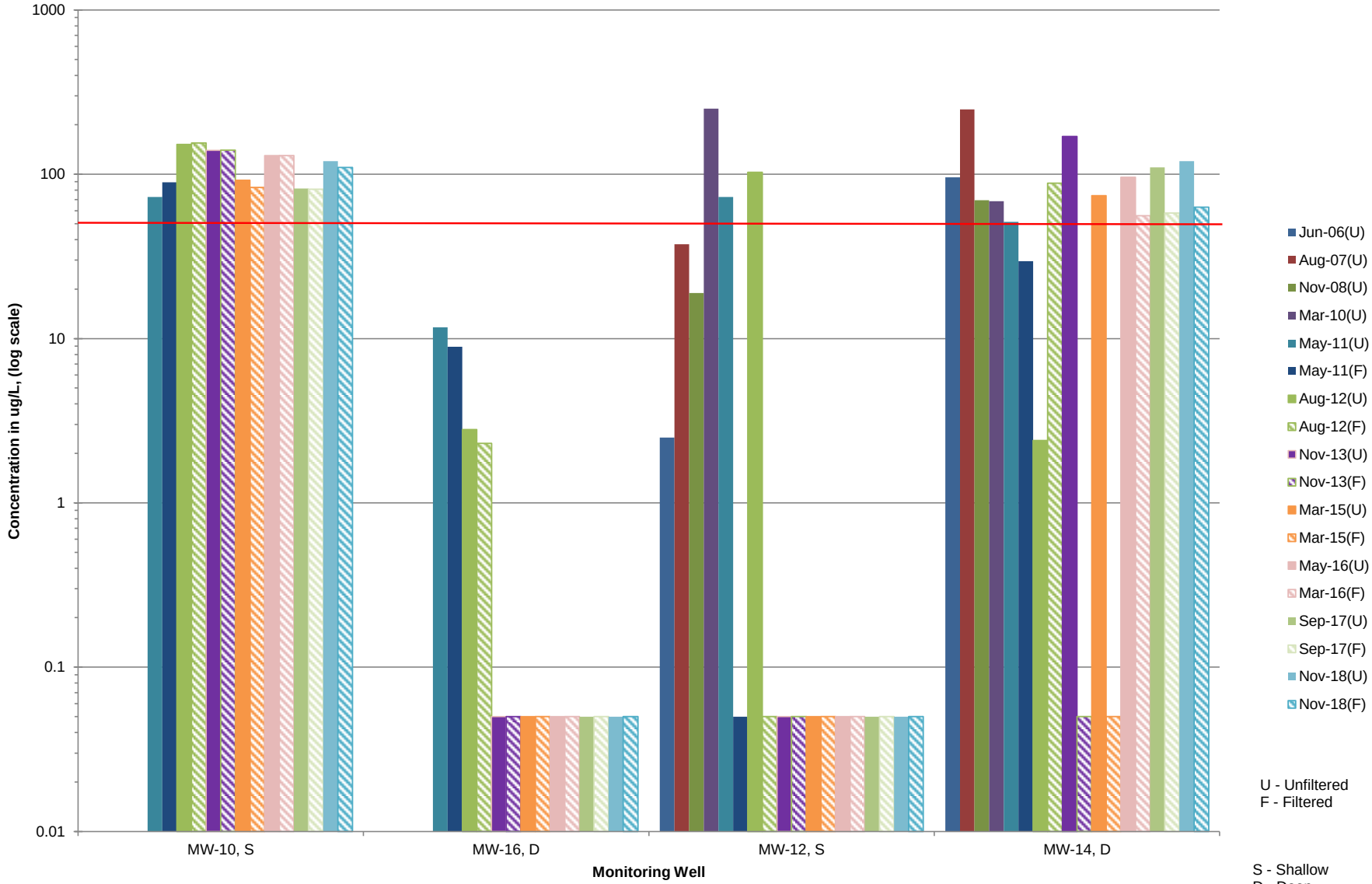
Chromium Class GA criterion is 50 ug/L
ND shown as 0.05 ug/L for plotting purposes

FIGURE 8A
CHROMIUM CONCENTRATIONS IN SOURCE AREA MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)

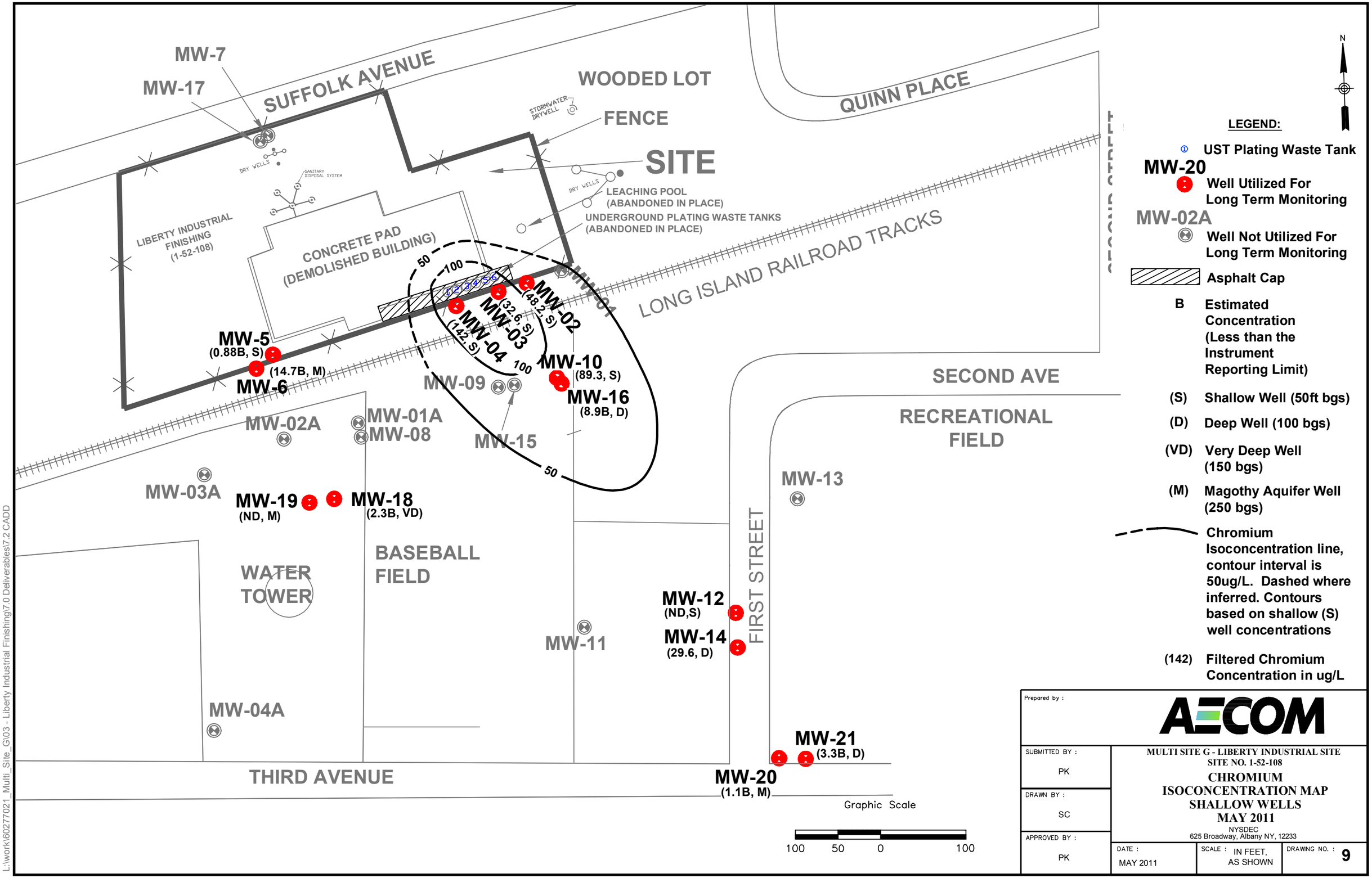


Chromium Class GA criterion is 50 ug/L
ND shown as 0.05 ug/L for plotting purposes

FIGURE 8B
CHROMIUM CONCENTRATIONS IN DOWNGRADIENT MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING, SITE (1-52-108)



Chromium Class GA criterion is 50 ug/L
ND shown as 0.05 ug/L for plotting purposes



Prepared by : AECOM

SUBMITTED BY : PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108 CHROMIUM ISOCONCENTRATION MAP SHALLOW WELLS MAY 2011 NYSDEC 625 Broadway, Albany NY, 12233
DRAWN BY : SC	
APPROVED BY : PK	DATE : MAY 2011 / SCALE : IN FEET, AS SHOWN / DRAWING NO. : 9

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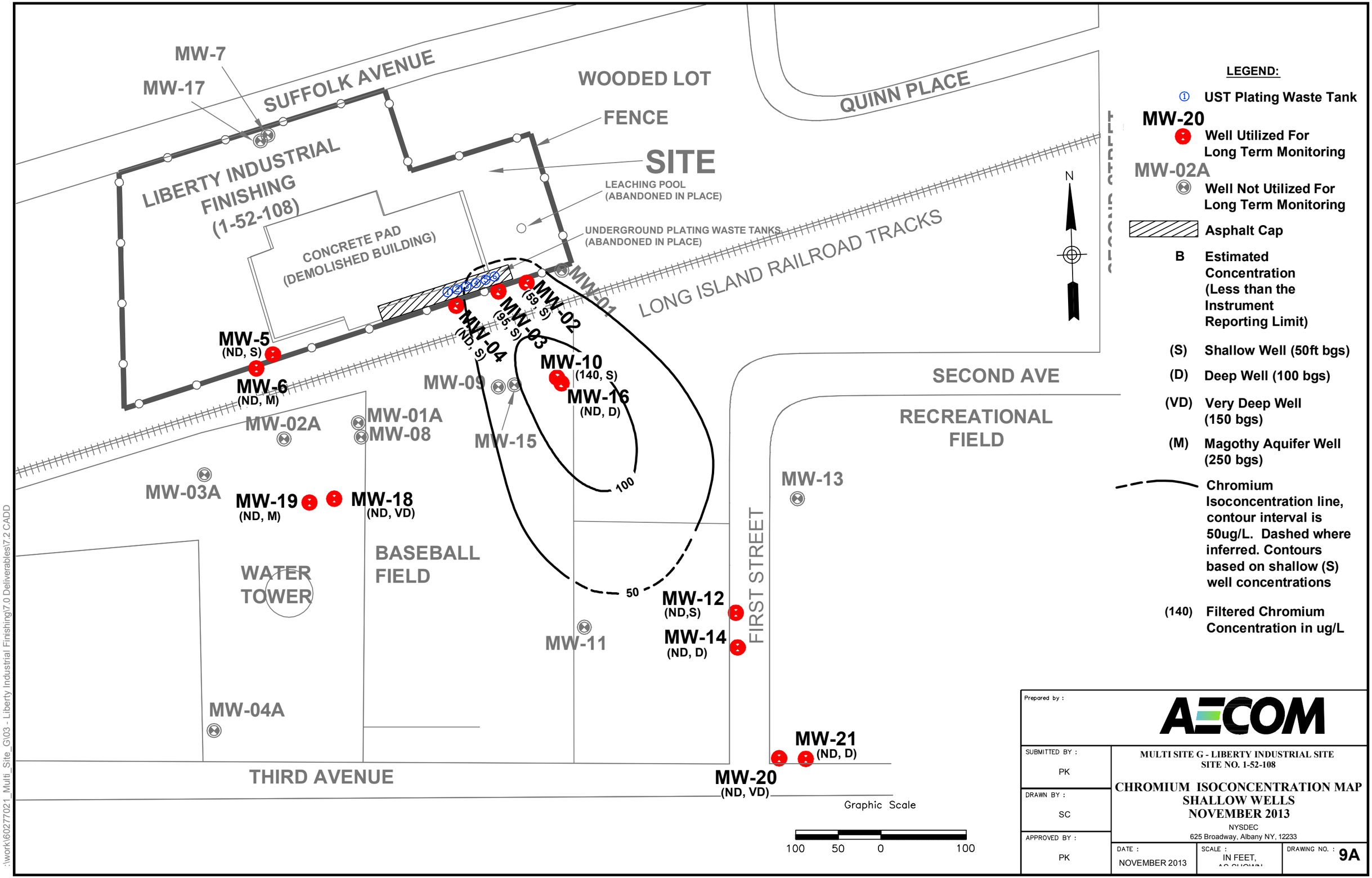

LEGEND:

- ① UST Plating Waste Tank
- **MW-20** Well Utilized For Long Term Monitoring
- **MW-02A** Well Not Utilized For Long Term Monitoring
- Asphalt Cap
- B Estimated Concentration (Less than the Instrument Reporting Limit)
- (S) Shallow Well (50ft bgs)
- (D) Deep Well (100 bgs)
- (VD) Very Deep Well (150 bgs)
- (M) Magothy Aquifer Well (250 bgs)
- Chromium Isoconcentration line, contour interval is 50ug/L. Dashed where inferred. Contours based on shallow (S) well concentrations
- (140) Filtered Chromium Concentration in ug/L

Prepared by : AECOM

SUBMITTED BY : PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108
DRAWN BY : SC	CHROMIUM ISOCONCENTRATION MAP SHALLOW WELLS NOVEMBER 2013
APPROVED BY : PK	NYSDEC 625 Broadway, Albany NY, 12233
DATE : NOVEMBER 2013	SCALE : IN FEET, AS SHOWN
DRAWING NO. : 9A	

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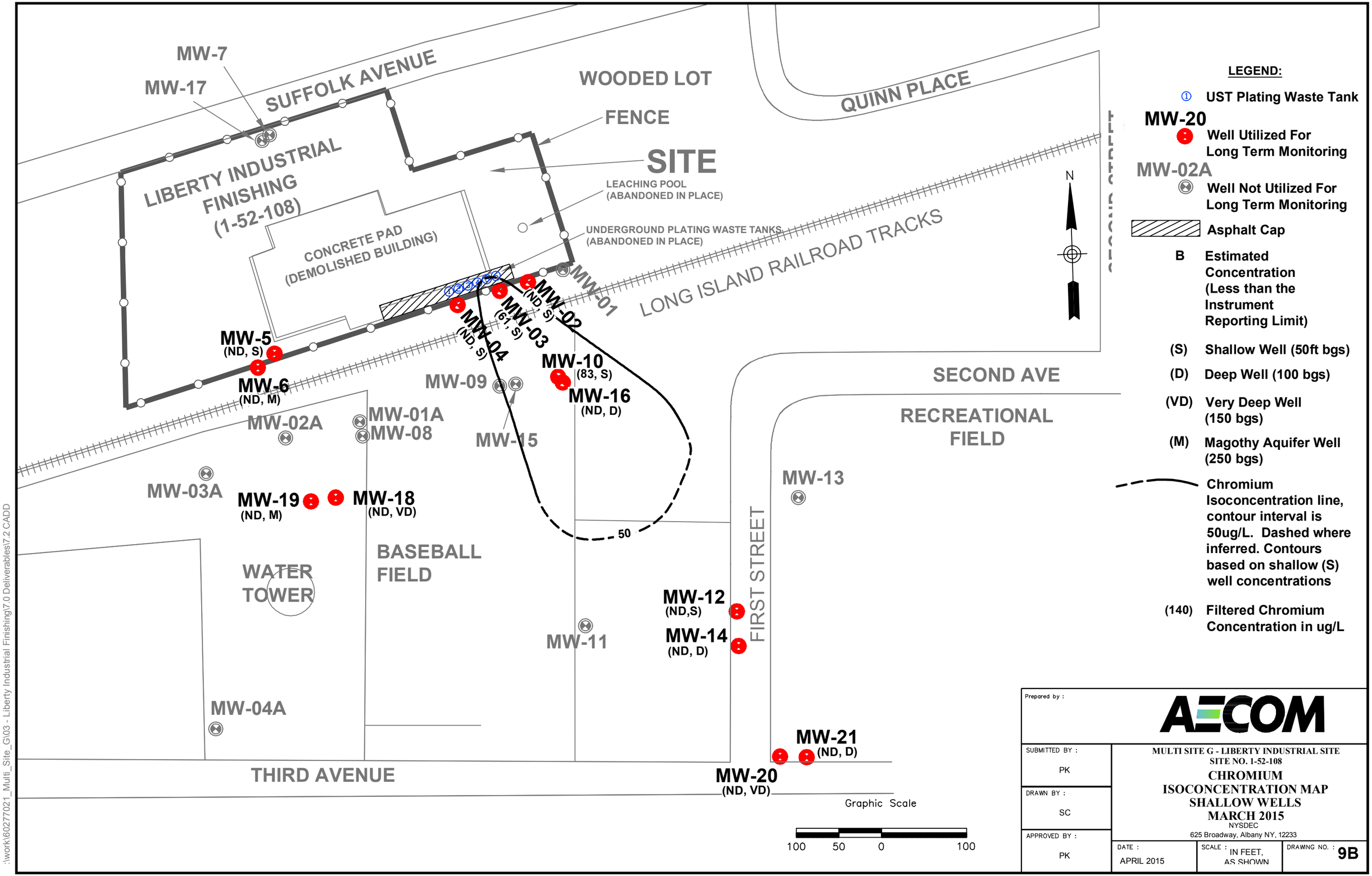

LEGEND:

- ① UST Plating Waste Tank
- **MW-20** Well Utilized For Long Term Monitoring
- **MW-02A** Well Not Utilized For Long Term Monitoring
- Asphalt Cap
- B Estimated Concentration (Less than the Instrument Reporting Limit)
- (S) Shallow Well (50ft bgs)
- (D) Deep Well (100 bgs)
- (VD) Very Deep Well (150 bgs)
- (M) Magothy Aquifer Well (250 bgs)
- Chromium Isoconcentration line, contour interval is 50ug/L. Dashed where inferred. Contours based on shallow (S) well concentrations
- (140) Filtered Chromium Concentration in ug/L

Prepared by : AECOM

SUBMITTED BY : PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108 CHROMIUM ISOCONCENTRATION MAP SHALLOW WELLS MARCH 2015 NYSDEC 625 Broadway, Albany NY, 12233
DRAWN BY : SC	
APPROVED BY : PK	DATE : APRIL 2015 / SCALE : IN FEET, AS SHOWN / DRAWING NO. : 9B

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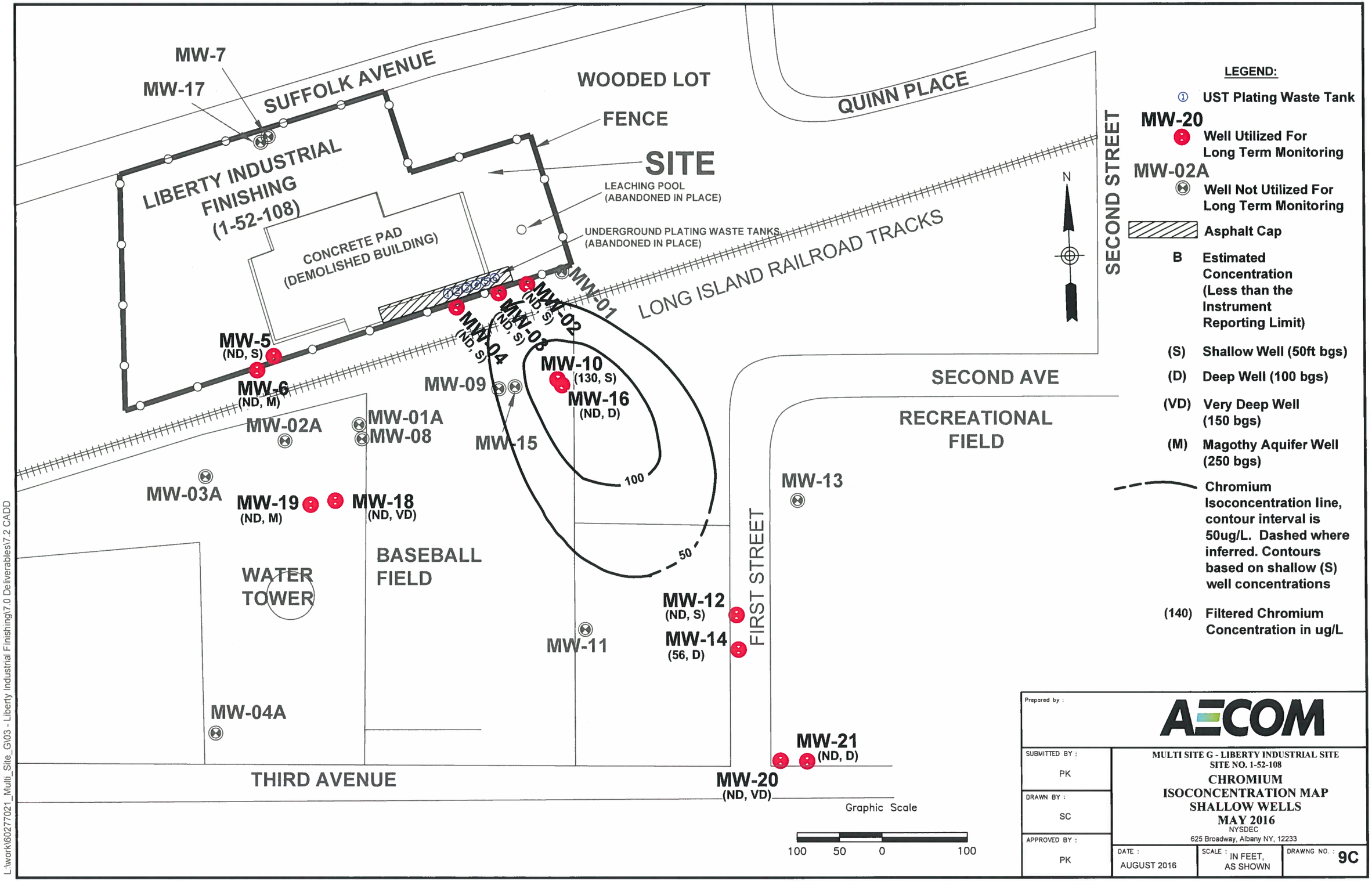

Prepared by : AECOM

SUBMITTED BY : PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108 CHROMIUM ISOCONCENTRATION MAP SHALLOW WELLS MAY 2016 NYSDEC 625 Broadway, Albany NY, 12233
DRAWN BY : SC	
APPROVED BY : PK	DATE : AUGUST 2016 / SCALE : IN FEET, AS SHOWN / DRAWING NO. : 9C

L:\work\60277021_Multi_Site_G\03 - Liberty Industrial Finishing\7.0 Deliverables\7.2 CADD

MW-7
MW-17
SUFFOLK AVENUE
WOODED LOT
FENCE
SITE
LIBERTY INDUSTRIAL FINISHING (1-52-108)
LEACHING POOL (ABANDONED IN PLACE)
UNDERGROUND PLATING WASTE TANKS (ABANDONED IN PLACE)
CONCRETE PAD (DEMOLISHED BUILDING)
QUINN PLACE
SECOND STREET
LONG ISLAND RAILROAD TRACKS
N
MW-01
MW-02 (ND, S)
MW-03 (ND, S)
MW-04 (90, S)
MW-5 (ND, S)
MW-6 (ND, M)
MW-10 (81, S)
MW-16 (ND, D)
MW-09
MW-15
MW-02A
MW-01A
MW-08
MW-03A
MW-19 (ND, M)
MW-18 (ND, VD)
WATER TOWER
BASEBALL FIELD
50
MW-12 (ND, S)
MW-14 (58, D)
MW-11
FIRST STREET
SECOND AVE
RECREATIONAL FIELD
MW-13
MW-04A
MW-21 (ND, D)
MW-20 (ND, VD)
THIRD AVENUE
Graphic Scale
100 50 0 100

LEGEND:

- ① UST Plating Waste Tank
- MW-20 — Well Utilized For Long Term Monitoring
- MW-02A — Well Not Utilized For Long Term Monitoring
- Asphalt Cap
- B — Estimated Concentration (Less than the Instrument Reporting Limit)
- (S) Shallow Well (50ft bgs)
- (D) Deep Well (100 bgs)
- (VD) Very Deep Well (150 bgs)
- (M) Magothy Aquifer Well (250 bgs)
- Chromium Isoconcentration line, contour interval is 50ug/L. Dashed where inferred. Contours based on shallow (S) well concentrations
- (140) Filtered Chromium Concentration in ug/L

Prepared by : AECOM

SUBMITTED BY : PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108 CHROMIUM ISOCONCENTRATION MAP SHALLOW WELLS SEPTEMBER 2017 NYSDEC 625 Broadway, Albany NY, 12233
DRAWN BY : SC	
APPROVED BY : PK	DATE : JANUARY 2018 / SCALE : IN FEET, AS SHOWN / DRAWING NO. : 9D

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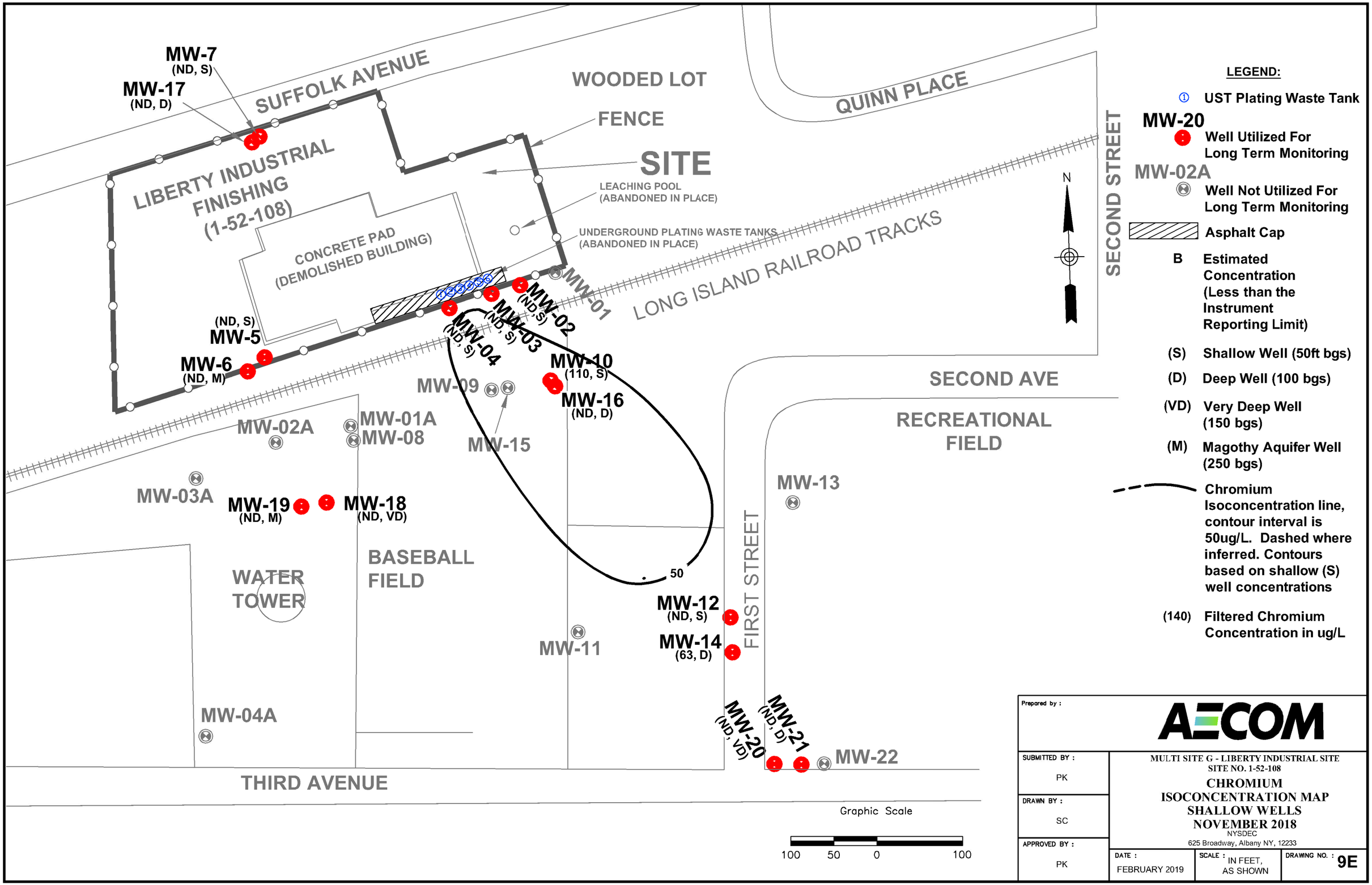


LEGEND:

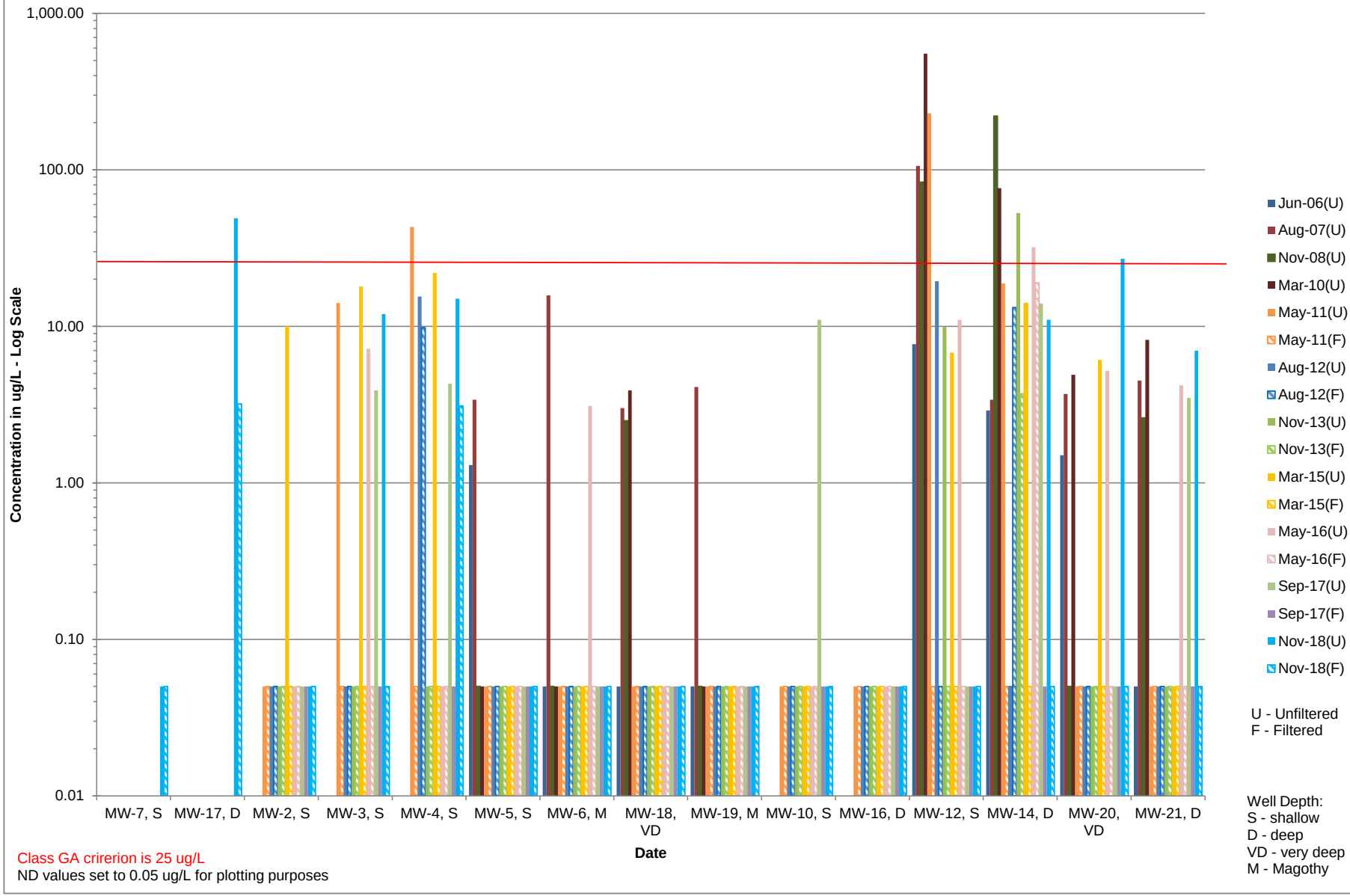
- ① UST Plating Waste Tank
- MW-20 — Well Utilized For Long Term Monitoring
- MW-02A — Well Not Utilized For Long Term Monitoring
- Asphalt Cap
- B — Estimated Concentration (Less than the Instrument Reporting Limit)
- (S) Shallow Well (50ft bgs)
- (D) Deep Well (100 bgs)
- (VD) Very Deep Well (150 bgs)
- (M) Magothy Aquifer Well (250 bgs)
- Chromium Isoconcentration line, contour interval is 50ug/L. Dashed where inferred. Contours based on shallow (S) well concentrations
- (140) Filtered Chromium Concentration in ug/L

Prepared by : AECOM

SUBMITTED BY : PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108 CHROMIUM ISOCONCENTRATION MAP SHALLOW WELLS NOVEMBER 2018 NYSDEC 625 Broadway, Albany NY, 12233
DRAWN BY : SC	
APPROVED BY : PK	DATE : FEBRUARY 2019 / SCALE : IN FEET, AS SHOWN / DRAWING NO. : 9E

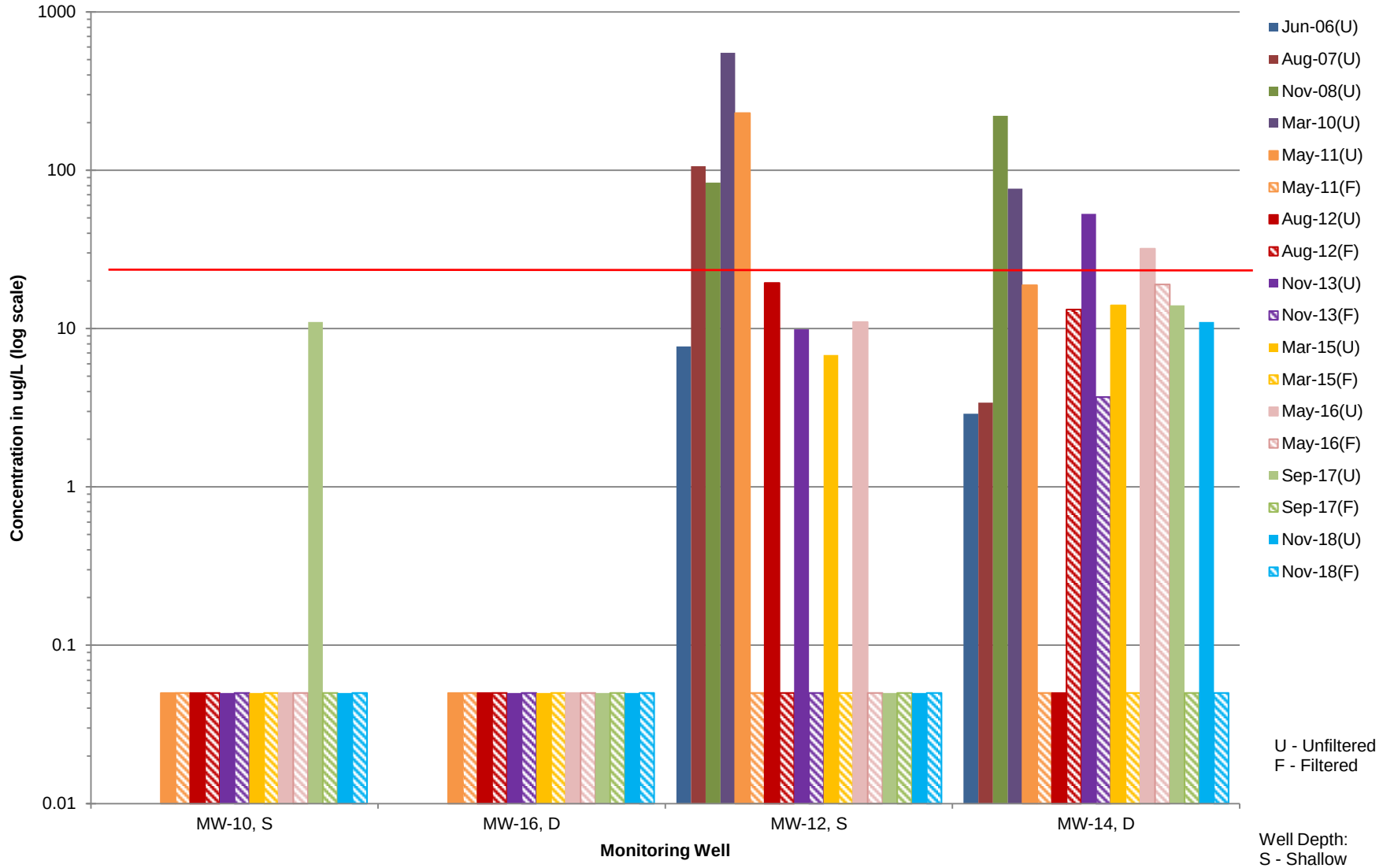
L:\work\60277021_Multi_Site_G\03 - Liberty Industrial Finishing\7.0 Deliverables\7.2 CADD

FIGURE 10
LEAD CONCENTRATIONS IN SELECTED MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)



Class GA crirerion is 25 ug/L
ND values set to 0.05 ug/L for plotting purposes

FIGURE 10A
LEAD CONCENTRATIONS IN DOWNGRADIENT MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING (1-52-108)



Class GA criterion is 25 ug/L
ND shown as 0.05 ug/L for plotting purposes

Appendix A

Monitoring Well Sampling Forms

AECOM

WELL NO. MW-2

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1 SHEETS
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/14/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 5.9 gallons WELL TD: 54.2 ft PUMP INTAKE DEPTH: 51 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
9:10	45.10								Static water level
9:10									pump on
9:15	45.11	250	12.46	0.166	1.41	6.24	161.4	13.2	
9:20	45.11	250	12.50	0.171	0.26	6.25	176.8	13.6	
9:25	45.11	250	12.51	0.173	0.63	6.25	179.7	13.3	
9:30	45.11	250	12.48	0.171	0.24	6.25	180.1	13.7	
9:35	45.11	250	12.48	0.165	0.39	6.23	183.9	12.8	
9:40	45.11	250	12.53	0.158	9.11	6.23	189.1	10.6	
9:45	45.11	250	12.54	0.158	9.09	6.22	190.5	11.1	
9:50	45.11	250	12.50	0.156	9.21	6.21	193.8	10.3	
9:52									Unfiltered Sample LMW-2 Collected
9:54									Filtered Sample LMW-2F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

AECOM

WELL NO. MW-3

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1 SHEETS
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/14/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 5.7 gallons WELL TD: 53.9 ft PUMP INTAKE DEPTH: 51 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
9:20	45.14								Static water level
9:20									pump on
9:25	45.14	300	11.37	0.176	7.79	6.01	162.0	22.6	
9:30	45.14	300	11.38	0.176	6.95	6.02	162.1	21.1	
9:35	45.14	300	11.58	0.174	7.82	6.02	165.4	22.4	
9:40	45.14	300	11.81	0.169	7.94	6.05	162.6	22.1	
9:45	45.14	300	11.88	0.169	8.30	6.05	162.0	22.3	
9:50	45.14	300	11.97	0.171	8.31	6.06	161.7	17.4	
9:55	45.14	300	11.82	0.172	8.48	6.08	161.5	17.3	
10:00	45.14	300	11.86	0.172	8.61	6.08	161.4	15.90	
10:02									Unfiltered Sample LMW-3 Collected
10:04									Filtered Sample LMW-3F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

AECOM

WELL NO. MW-4

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/14/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 5.2 gallons WELL TD: 53.4 ft PUMP INTAKE DEPTH: 51.0 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
9:25	45.48								Static water level
9:25									pump on
9:30	45.48	250	12.34	0.160	10.44	6.55	195.8	51.0	
9:35	45.48	250	12.64	0.156	12.10	6.60	194.4	45.4	
9:40	45.48	250	12.87	0.157	14.11	6.73	198.6	40.6	
9:45	45.48	250	12.85	0.157	14.20	6.74	198.9	42.4	
9:50	45.48	250	12.85	0.159	14.64	6.78	201.2	40.2	
9:55	45.48	250	12.75	0.160	14.78	6.82	204.8	37.6	
10:00	45.48	250	12.70	0.161	14.74	6.83	206.2	34.8	
10:05	45.48	250	12.71	0.161	14.76	6.83	206.3	34.8	
10:10	45.48	250	12.62	0.161	14.64	6.83	207.6	31.8	
10:15	45.48	250	12.79	0.164	14.59	6.83	209.4	29.9	
10:20	45.48	250	12.90	0.165	14.41	6.83	211.6	28.4	
10:22									Unfiltered Sample LMW-4 Collected
10:24									Filtered Sample LMW-4F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

AECOM

WELL NO. MW-5

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/14/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 1.8 gallons WELL TD: 50 ft PUMP INTAKE DEPTH: 49 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
10:10	47.19								Static water level
10:15									pump on
10:25	47.19	250	12.95	0.441	0.59	6.28	-126.6	126.3	
10:35	47.19	250	12.93	0.427	0.44	6.27	-147.7	94.0	
10:40	47.19	250	13.01	0.400	0.45	6.26	-157.8	75.8	
10:45	47.19	250	13.00	0.374	0.83	6.23	-157.6	48.0	
10:50	47.19	250	12.98	0.349	0.93	6.20	-168.6	35.9	
10:55	47.19	250	13.10	0.333	1.34	6.18	-164.3	27.6	
11:00	47.19	250	13.05	0.320	1.60	6.16	-159.7	24.4	
11:05	47.19	250	13.05	0.319	1.59	6.16	-159.5	22.8	
11:10	47.19	250	13.10	0.315	1.60	6.16	-159.3	22.7	
11:12									Unfiltered Sample LMW-5 Collected
11:14									Filtered Sample LMW-5F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

AECOM

WELL NO. MW-6

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1 SHEETS
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/14/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 143 gallons WELL TD: 265 ft PUMP INTAKE DEPTH: 259 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
9:50	45.98								Static water level
9:55									pump on, no water
10:05	45.98	250	11.37	0.103	11.17	6.94	85.2	9.5	
10:15	45.98	250	11.46	0.103	10.83	5.94	110.9	9.0	
10:25	45.98	250	11.69	0.103	10.61	5.95	143.3	6.9	
10:35	45.98	250	11.43	0.103	10.58	5.95	148.8	7.1	
10:40	45.98	250	11.71	0.103	10.51	5.94	155.5	6.7	
10:45	45.98	250	11.58	0.103	10.52	5.94	160.3	6.5	
10:50	45.98	250	11.60	0.103	10.51	5.94	163.1	6.5	
10:55	45.98	250	11.63	0.103	10.52	5.94	163.6	6.5	
11:00									Unfiltered Sample LMW-6 Collected
11:02									Filtered Sample LMW-6F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

AECOM

WELL NO. MW-7

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/13/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 1.42 gallons WELL TD: 54.7 ft PUMP INTAKE DEPTH: 50 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
	45.99								Static water level 11/12/2018
9:00	45.95								Static water level 11/13/2018
9:00									pump on
9:20	45.95	250	13.40	0.148	8.35	5.35	221.2	92.6	
9:25	45.95	250	13.33	0.146	11.54	5.29	245.3	38.1	
9:30	45.95	250	13.27	0.144	13.26	5.29	261.5	13.1	
9:35	45.95	250	13.28	0.146	13.83	5.30	269.6	7.5	
9:40	45.95	250	13.27	0.145	14.31	5.28	280.5	5.0	
9:45	45.95	250	13.29	0.144	14.78	5.26	293.8	3.2	
9:50	45.95	250	13.30	0.146	14.83	5.25	295.7	3.0	
9:55	45.95	250	13.30	0.146	14.89	5.25	298.2	2.7	
10:01									Unfiltered Sample LMW-7 Collected
10:03									Filtered Sample LMW-7F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

AECOM

WELL NO. MW-10

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/12/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 3.7 gallons WELL TD: 50 ft PUMP INTAKE DEPTH: 48 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
11:20	44.40								Static water level
11:25									pump on
11:35	44.40	250	13.40	0.141	10.84	5.65	162.5	10.2	
11:40	44.40	250	13.35	0.145	9.89	5.56	209.5	6.7	
11:45	44.40	250	13.15	0.149	9.89	5.62	234.6	4.7	
11:50	44.40	250	13.25	0.159	10.49	5.75	251.4	3.7	
11:55	44.40	250	13.31	0.165	10.90	5.79	264.8	2.8	
12:00	44.40	250	13.23	0.165	11.13	5.81	270.4	2.9	
12:05	44.40	250	13.22	0.165	11.14	5.80	273.5	2.5	
12:10	44.40	250	13.23	0.165	11.17	5.80	274.8	2.3	
12:15									Unfiltered Sample LMW-10 Collected
12:17									Filtered Sample LMW-10F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

AECOM

WELL NO. MW-12

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/12/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 0.87 gallons WELL TD: 49.3 ft PUMP INTAKE DEPTH: 47.0 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
8:40	43.98								Static water level
8:45									pump on
8:55	44.21	250	14.73	0.262	8.09	7.30	62.6	286.1	
9:00	44.21	250	15.01	0.309	6.57	6.86	29.8	114.4	
9:05	44.21	250	15.02	0.339	1.45	6.75	33.0	75.3	
9:10	44.21	250	14.96	0.354	1.41	6.68	39.5	45.2	
9:15	44.21	250	15.01	0.387	0.95	6.57	44.3	31.7	
9:20	44.21	250	15.05	0.364	0.32	6.54	58.7	20.3	
9:25	44.21	250	15.09	0.365	0.75	6.50	65.9	14.8	
9:30	44.21	250	15.02	0.359	2.15	6.44	77.1	10.1	
9:35	44.21	250	15.04	0.356	2.24	6.40	85.6	9.8	
9:40	44.21	250	15.02	0.356	2.35	6.40	86.4	9.2	
9:45								+MS/MSD	Unfiltered Sample LMW-12 Collected
9:47								+MS/MSD	Filtered Sample LMW-12F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

AECOM

WELL NO. MW-14

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/12/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 9.11 gallons WELL TD: 100 ft PUMP INTAKE DEPTH: 95 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
8:50	44.14								Static water level
8:50									pump on
8:55	44.12	250	15.08	0.170	3.29	6.45	69.4	181.0	
9:00	44.11	250	14.73	0.143	4.68	5.53	104.1	150.9	
9:05	44.11	250	14.62	0.139	5.23	5.46	120.1	121.4	
9:10	44.11	250	14.59	0.138	5.83	5.42	141.3	91.9	
9:15	44.11	250	14.58	0.137	6.23	5.39	157.2	59.6	
9:20	44.11	250	14.63	0.138	6.17	5.37	168.4	34.3	
9:25	44.11	250	14.60	0.138	6.33	5.38	172.9	30.0	
9:30	44.11	250	14.60	0.138	6.54	5.36	177.3	27.2	
9:35									Unfiltered Sample LMW-14 Collected
9:38									Filtered Sample LMW-14F Collected
							11:10	Duplicate	Unfiltered Sample LMW-64 Collected
							11:12	Duplicate	Filtered Sample LMW-64F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

AECOM

WELL NO. MW-16

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1 SHEETS
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/12/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 8.90 gallons WELL TD: 99.2 ft PUMP INTAKE DEPTH: 95 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
11:30	44.62								Static water level
11:30									pump on
11:35	44.62	250	12.87	0.123	5.04	5.70	77.7	287.1	
11:40	44.62	250	12.84	0.142	4.62	4.99	121.8	258.9	
11:45	44.62	250	12.79	0.147	5.32	4.86	178.9	162.2	
11:50	44.62	250	12.87	0.148	5.23	4.86	199.0	129.4	
11:55	44.62	250	12.87	0.148	5.22	4.86	206.6	101.1	
12:00	44.62	250	12.85	0.148	5.19	4.86	209.7	80.2	
12:05	44.62	250	12.90	0.148	4.98	4.87	213.3	68.3	
12:10									Unfiltered Sample LMW-16 Collected
12:12									Filtered Sample LMW-16F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

AECOM

WELL NO. MW-17

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1 SHEETS
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/13/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 0.55 gallons WELL TD: 49.85 ft PUMP INTAKE DEPTH: 47 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
9:20	46.50								Static water level
9:20									pump on
9:30	46.50	200	13.40	0.314	0.75	6.40	67.3	270.4	
9:35	46.49	200	13.39	0.309	0.63	6.35	67.0	224.9	
9:40	46.49	200	13.36	0.302	0.48	6.28	67.2	182.0	
9:45	46.49	200	13.36	0.296	0.45	6.19	68.4	101.4	
9:50	46.49	200	13.36	0.290	0.40	6.13	69.9	94.8	
10:00									Unfiltered Sample LMW-17 Collected
10:02									Filtered Sample LMW-17F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

AECOM

WELL NO. MW-18

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/13/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 17.00 gallons WELL TD: 150 ft PUMP INTAKE DEPTH: 145 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
11:55	45.70								Static water level
12:00									pump on
12:10	45.70	200	12.61	0.241	8.69	5.77	137.7	28.7	
12:15	45.70	200	12.57	0.242	7.67	5.48	156.4	33.4	
12:20	45.70	200	12.55	0.243	6.63	5.35	175.6	24.7	
12:25	45.70	200	12.42	0.245	6.22	5.31	189.0	12.7	
12:30	45.70	200	12.41	0.246	5.93	5.29	199.5	6.2	
12:35	45.70	200	12.41	0.246	5.68	5.29	203.0	4.9	
12:40	45.70	200	12.40	0.246	5.46	5.29	203.7	5.0	
12:45	45.70	200	12.39	0.246	5.60	5.29	204.2	5.2	
12:50									Unfiltered Sample LMW-18 Collected
12:52									Filtered Sample LMW-18F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

AECOM

WELL NO. MW-19

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/13/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 131.5 gallons WELL TD: 248 ft PUMP INTAKE DEPTH: 243 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
11:45	46.55								Static water level
11:45									pump on
11:55	46.55	200	12.55	0.129	3.92	5.62	270.6	0.1	
12:00	46.55	200	12.56	0.129	2.07	5.55	279.5	0.0	
12:05	46.55	200	12.55	0.129	1.85	5.55	280.2	0.0	
12:10	46.55	200	12.54	0.129	1.77	5.55	280.5	0.0	
12:15	46.55	200	12.54	0.129	1.68	5.56	281.1	0.0	
12:20	46.55	200	12.55	0.129	1.55	5.56	281.9	0.0	
12:25	46.55	200	12.47	0.129	1.31	5.56	282.8	0.0	
12:30	46.55	200	12.47	0.129	1.20	5.56	283.2	0.0	
12:35	46.55	200	12.47	0.129	1.15	5.57	283.6	0.0	
12:40									Unfiltered Sample LMW-19 Collected
12:42									Filtered Sample LMW-19F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

AECOM

WELL NO. MW-20

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/12/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 17.41 gallons WELL TD: 150 ft PUMP INTAKE DEPTH: 145 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
12:52	43.22								Static water level
12:55									pump on, no water
13:05	43.22	250	14.48	0.222	6.33	5.92	171.7	1553.4	
13:10	43.22	250	14.17	0.233	7.82	5.66	186.8	1448.4	
13:15	43.22	250	14.08	0.233	8.74	5.62	190.8	845.7	
13:20	43.22	250	14.03	0.232	9.76	5.63	194.3	488.7	
13:25	43.22	250	14.04	0.232	9.36	5.63	194.9	452.7	
13:30	43.22	250	13.99	0.231	9.97	5.64	196.5	290.3	
13:35	43.22	250	14.02	0.231	10.72	5.66	198.0	204.8	
13:40	43.22	250	14.10	0.231	11.26	5.66	199.3	158.9	
13:45	43.22	250	14.11	0.230	11.64	5.67	201.6	98.2	
13:50	43.22	250	14.15	0.229	11.79	5.68	202.6	87.4	
13:55	43.22	250	14.22	0.227	12.01	5.69	203.5	84.6	
14:00									Unfiltered Sample LMW-20 Collected
14:02									Filtered Sample LMW-20F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

AECOM

WELL NO. MW-21

WELL SAMPLING FORM	PROJECT: Liberty Industrial Finishing	PROJECT No.: 602770271	SHEET: 1 OF 1
LOCATION: Brentwood, NY		DATE WELL SAMPLED: 11/12/2018	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and Jim Christopher	

ONE WELL VOLUME : 10.97 gallons WELL TD: 110.5 ft PUMP INTAKE DEPTH: 105 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
12:45	43.20								Static water level
12:55									pump on
13:05	43.20	250	14.31	0.225	11.40	5.49	243.2	95.3	
13:10	43.20	250	14.23	0.224	12.08	5.44	240.9	77.7	
13:15	43.20	250	14.20	0.223	12.17	5.43	238.9	71.4	
13:20	43.20	250	14.16	0.222	12.53	5.42	233.0	57.2	
13:25	43.20	250	14.14	0.222	12.59	5.42	231.7	55.3	
13:30	43.20	250	14.15	0.222	12.67	5.43	228.2	56.6	
13:35	43.20	250	14.21	0.222	12.70	5.44	223.4	54.8	
13:40									Unfiltered Sample LMW-21 Collected
13:42									Filtered Sample LMW-21F Collected
									1/4" (OD) poly and 1/4" (OD) poly
									bonded tubing put back into the well.

Pump Type: Bladder Pump

Analytical Parameters: TAL Metals (Total and Field Filtered)

Appendix B

NYSDEC Monitoring Well Field Inspection Logs

SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC
DATE/TIME: 11/12/18 10:45
WEll ID.: LMW-1

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)		X

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report
PDOP Reading from Trimble pathfinder: _____ Satelites: _____
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: NA

	YES	NO
SURFACE SEAL PRESENT?		X
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		X
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?		X

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 43.10
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): Dry
MEASURE WELL DIAMETER (Inches): 4
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE: -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: CLOSE

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Well was under debris and garbage. Between two fences, not accessible by truck.

Well was dry.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Well is located between two fences (site fence and defunct fence section) currently full of vegatation, debris and garbage from vagrants.

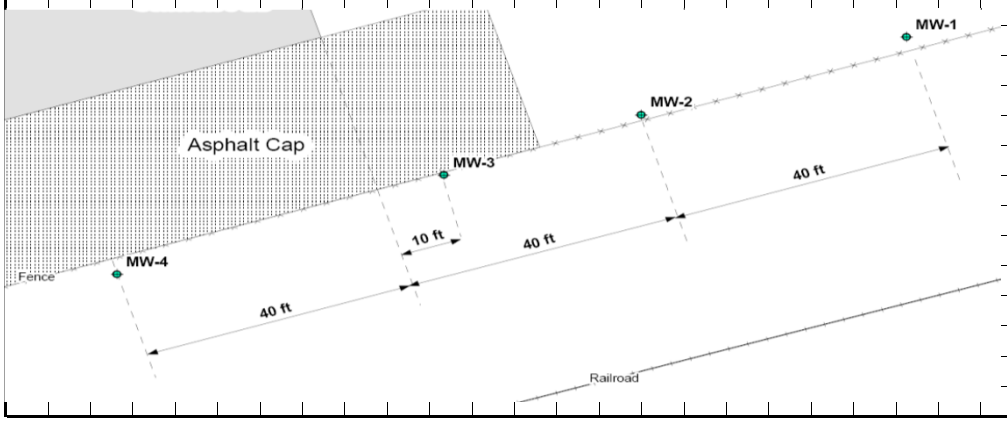
IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Capped area on-site. Gas station to the west of the Site. Railroad to south.

REMARKS:

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/14/18 9:00
WEll ID.: LMW-2

	YES	NO
WELL VISIBLE? (If not, provide directions below)		X

WELL COORDINATES? NYTM X 2,206,950.31 NYTM Y 201,798.35 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: NA

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 54.12
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 45.10
MEASURE WELL DIAMETER (Inches): 4
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE: -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: CLOSE

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
overhead lines, close to fence and railroad property

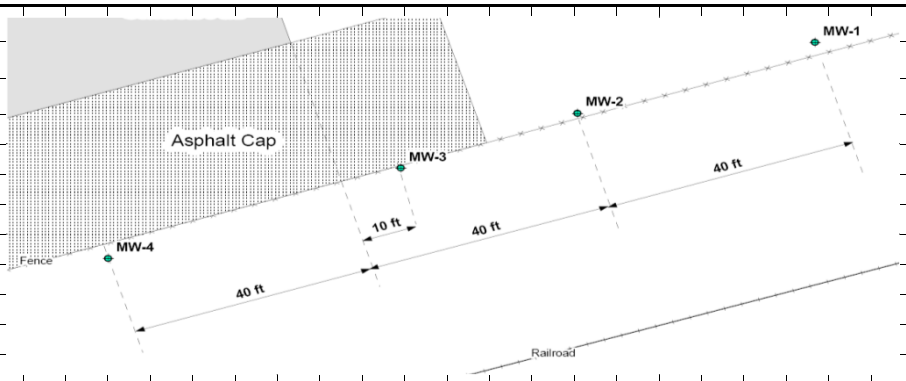
DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
within site fence, surrounded by overgrown vegetation

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
Capped area on-site. Gas station to the west of the Site. Railroad to south.

REMARKS:
New bolts needed, 1/4" poly bonded tubing left in well.
Fence marked at location with 2 stripes of tape to aid in locating the well.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC
DATE/TIME: 11/14/18 9:00
WEll ID.: LMW-3

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)		X

WELL COORDINATES? NYTM X 2,206,950.31 NYTM Y 201,798.35 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: NA

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 53.9
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 45.14
MEASURE WELL DIAMETER (Inches): 4
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE: -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: CLOSE

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Not accessible, in between site fence and railroad fence. Overhead lines also present.

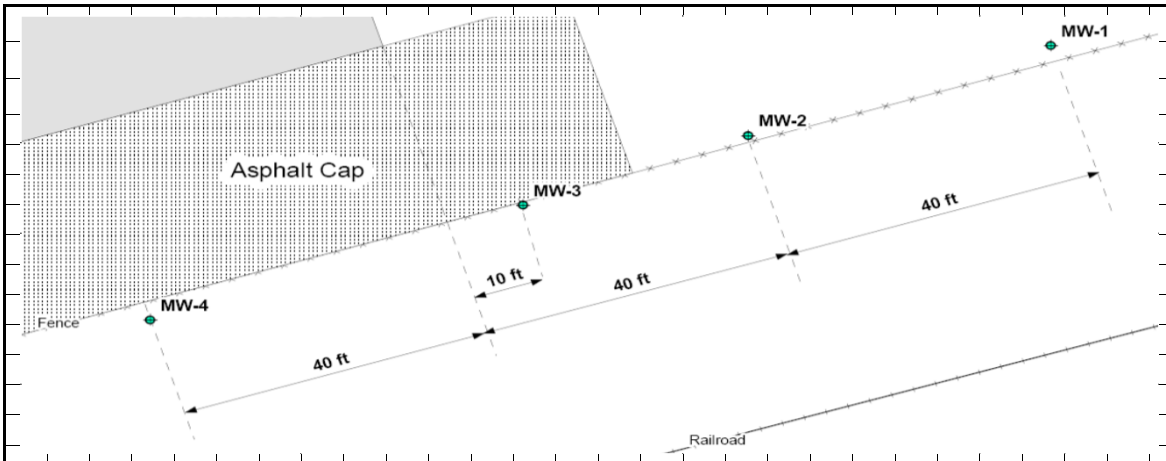
DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Between site fence and railroad fence, covered by vegetation.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
Capped area on-site. Gas station to the west of the Site. Railroad to south.

REMARKS:
New bolts needed, 1/4" poly bonded tubing left in well.
Fence marked at location with 3 stripes of tape to aid in locating the well.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/14/18 9:00
WEll ID.: LMW-4

	YES	NO
WELL VISIBLE? (If not, provide directions below)		X

WELL COORDINATES? NYTM X 2,206,950.31 NYTM Y 201,798.35 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: NA

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 53.4
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 45.48
MEASURE WELL DIAMETER (Inches): 4
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE: -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: CLOSE

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Not accessible, in between site fence and railroad fence. Overhead lines also present.

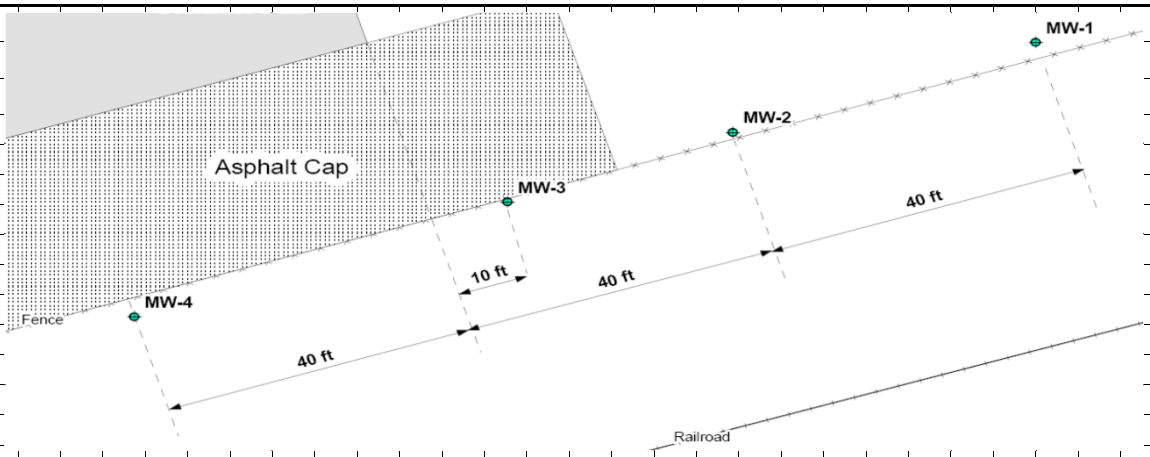
DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Between site fence and railroad fence, covered by vegetation.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
Capped area on-site. Gas station to the west of the Site. Railroad to south.

REMARKS:
New bolts needed, 1/4" poly bonded tubing left in well.
Fence marked at location with 4 stripes of tape to aid in locating the well.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC
DATE/TIME: 11/14/18 10:00
WEll ID.: LMW-5

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X 2,206,350.98 NYTM Y 202,308.86 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: NA

	YES	NO
SURFACE SEAL PRESENT?		X
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		X
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)		X

Cap does not close properly. Lid is not flush with casing.

HEADSPACE READING (ppm) AND INSTRUMENT USED	NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	2
PROTECTIVE CASING MATERIAL TYPE:	SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	58
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	47.19
MEASURE WELL DIAMETER (Inches):	4
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	-
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Overgrown vegetation, accessible by truck mounted rig with some clearing.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

located in a wooded area between site concrete and fence, surrounded by overgrown vegetation

surrounded by debris and trash

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Capped area on-site. Gas station to the west of the Site. Railroad to south.

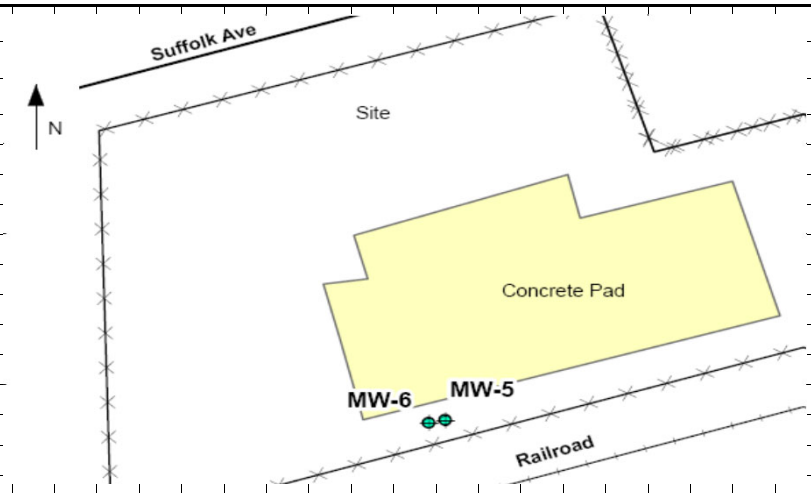
REMARKS:

Well J-Plug/cap is missing, needs a new one. Needs a lock.

1/4" poly bonded tubing left in well, new tubing may be needed next round.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC
DATE/TIME: 11/14/18 10:00
WEll ID.: LMW-6

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X 2,206,341.15 NYTM Y 202,306.77 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: NA

	YES	NO
SURFACE SEAL PRESENT?		X
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		X
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): 1
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 265
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 45.98
MEASURE WELL DIAMETER (Inches): 4
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: Average
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE: -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: -

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Overgrown vegetation, accessible by truck mounted rig with some clearing.

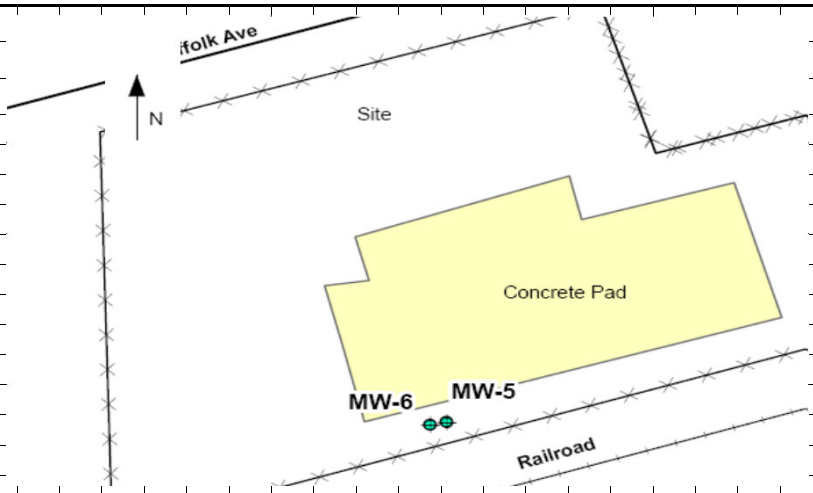
DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
located in a wooded area between site concrete and fence, surrounded by overgrown vegetation
surrounded by debris and trash

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
Capped area on-site. Gas station to the west of the Site. Railroad to south.

REMARKS:
Well J-Plug/cap is missing, needs a new one. Needs a lock.
1/4" poly bonded tubing left in well by weighing it down.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/12/18 11:00
WEll ID.: LMW-7

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYSP FT X 1,190,688.17 NYSP FT Y 224,021.21 Based on aerial
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: NA

	YES	NO
SURFACE SEAL PRESENT?		X
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		X
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 54.7
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 45.99
MEASURE WELL DIAMETER (Inches): 4
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: Average
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE: -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: -

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Overgrown vegetation, accessible by truck mounted rig with some clearing.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
located along Suffolk Ave side of the site on a slight incline, surrounded by overgrown vegetation
surrounded by debris and trash

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
Capped area on-site. Gas station to the west of the Site. Railroad to south.

REMARKS:
Well J-Plug/cap is missing, needs a new one. No locks or bolts.
1/4" poly bonded tubing left in well

MONITORING WELL INSPECTION LOG

SKETCH

SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/12/18 11:15
WEll ID.: LMW-10

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X 2,206,950.31 NYTM Y 201,798.35 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: NA

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 50.00
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 44.40
MEASURE WELL DIAMETER (Inches): 4
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: RUSTY
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE: -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: -

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Accessible by truck mounted rig across ball fields.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
baseball field edge, grass
homeless dwelling on other side of fence, between field and a railroad

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
School bus parking lot, recharge Basin and railroad

REMARKS:
New bolts needed. 1/4" poly bonded tubing left in well.

MONITORING WELL INSPECTION LOG

SKETCH

SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/12/18 8:30
WEll ID.: LMW-12

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X 2,206,863.98 NYTM Y 201,973.43 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: NA

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 49.3
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 44.98
MEASURE WELL DIAMETER (Inches): 2
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE: -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: -

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Located on the ROW along First Street on the corner of parking lot

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
Parking Lot, Street, Recharge basin across First St

REMARKS:
New j-plug needed, bolts needed, 1/4" poly bonded tubing left in well. Well had a lot of sedimentation built up in and around the well. Area has been recently excavated to put in drainage.

MONITORING WELL INSPECTION LOG

SKETCH

SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/12/18 8:30
WEll ID.: LMW-14

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X 2,206,866.03 NYTM Y 201,966.33 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: NA

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 100
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 44.14
MEASURE WELL DIAMETER (Inches): 2
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: Cracked
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE: -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: -

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Located on the ROW along First Street on the corner of parking lot

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
Parking Lot, Street, Recharge basin across First St

REMARKS:
PVC cracked and new bolts needed, 1/4" poly bonded tubing left in well. Well had a lot of sedimentation built up in and around the well. Area has been recently excavated to put in drainage.

MONITORING WELL INSPECTION LOG

SKETCH

SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/12/18 11:15
WEll ID.: LMW-16

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X 2,206,950.31 NYTM Y 201,798.35 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?	X	
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: NA

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 99.2
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 44.62
MEASURE WELL DIAMETER (Inches): 2
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE: -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: -

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Accessible by truck mounted rig across ball fields.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
baseball field edge, grass

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
School bus parking lot, recharge Basin and railroad
homeless dwelling on other side of fence, between field and a railroad

REMARKS:
New bolts needed. 1/4" poly bonded tubing left in well.

MONITORING WELL INSPECTION LOG

SKETCH

SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/12/18 11:00
WEll ID.: LMW-17

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYSP FT X 1,190,676.06 NYSP FT Y 224,015.15 Based on aerial
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: NA

	YES	NO
SURFACE SEAL PRESENT?		X
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		X
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)		X

HEADSPACE READING (ppm) AND INSTRUMENT USED: NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?		X

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 49.85
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 45.49
MEASURE WELL DIAMETER (Inches): 2
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: Broken
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE: -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: -

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Overgrown vegetation, accessible by truck mounted rig with some clearing.

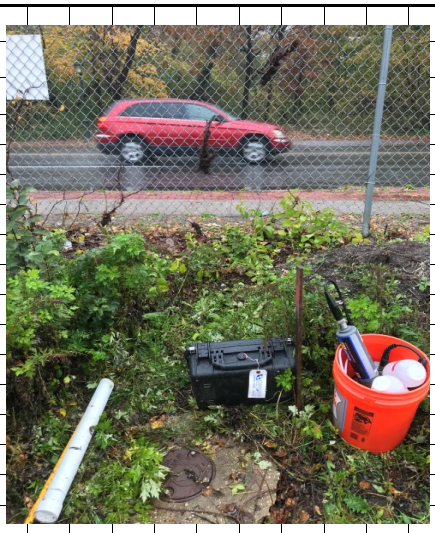
DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
located along Suffolk Ave side of the site on a slight incline, surrounded by overgrown vegetation
surrounded by debris and trash

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
Capped area on-site. Gas station to the west of the Site. Railroad to south.

REMARKS:
Well PVC and casing are broken. 1/4" poly bonded tubing left in well.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC
DATE/TIME: 11/13/18 11:30
WEll ID.: LMW-18

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X 2,206,386.65 NYTM Y 202,102.30 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED	NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	NA
PROTECTIVE CASING MATERIAL TYPE:	SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	150
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	45.70
MEASURE WELL DIAMETER (Inches):	2
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	-
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Not accessible by truck mounted rig due to partly opening fence gate, trees and not enough turning radius for truck
Accessed through second gate.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Located in the grassy area behind the water tower, within fence that surrounds the recharge basin.
Due to overgrown grass, wells were located with some difficultly.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

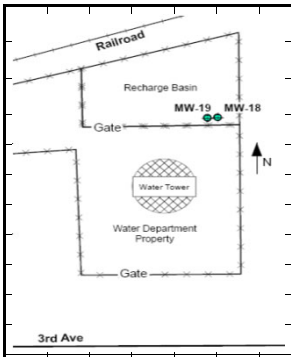
Recharge/Discharge Basin. Railroad to north.

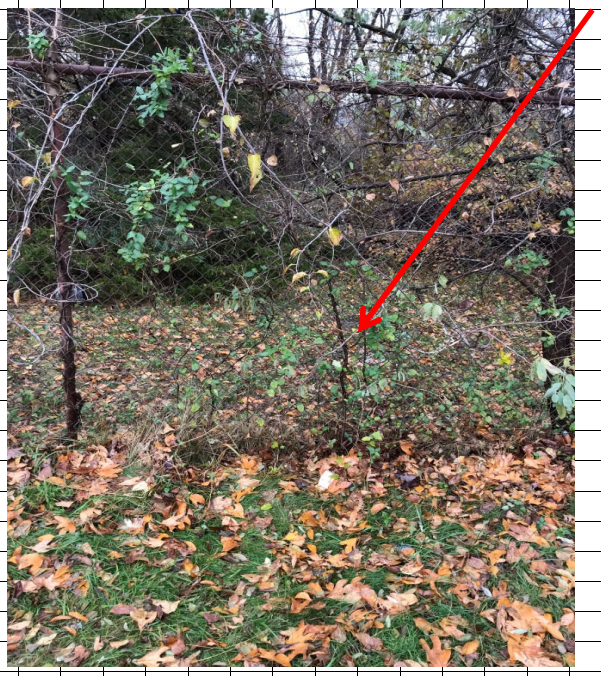
REMARKS:

New bolts needed. 1/4" poly bonded tubing left in well.

MONITORING WELL INSPECTION LOG

SKETCH





SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC
DATE/TIME: 11/13/18 11:30
WEll ID.: LMW-19

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X 2,206,373.86 NYTM Y 202,101.70 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED	NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	NA
PROTECTIVE CASING MATERIAL TYPE:	SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	8

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	248
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	46.55
MEASURE WELL DIAMETER (Inches):	2
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	-
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Not accessible by truck mounted rig due to partly opening fence gate, trees and not enough turning radius for truck
Accessed through second gate.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Located in the grassy area behind the water tower, within fence that surrounds the recharge basin.
Due to overgrown grass, wells were located with some difficultly.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

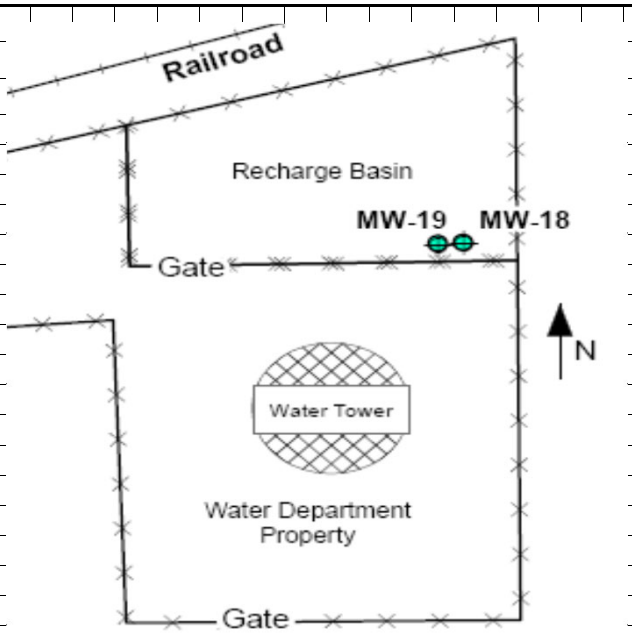
Recharge/Discharge Basin. Railroad to north.

REMARKS:

1/4" poly bonded tubing left in well by weighing it down, tubing got snagged going down and had to be cut
new tubing may be needed next round.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/12/18 12:40
WEll ID.: LMW-20

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X 2,206,946.09 NYTM Y 201,798.92 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: NA

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 150
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 43.22
MEASURE WELL DIAMETER (Inches): 2
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE: -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: -

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Grassy area in right of way along 3rd Ave
Hard to locate well under grass and dirt.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
Road, Recharge Basin

REMARKS:
New bolts needed. 1/4" poly bonded tubing left in well.

MONITORING WELL INSPECTION LOG

SKETCH

SITE NAME: **Liberty Industrial Finishing**

SITE ID.: 1-52-108
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/12/18 12:40
WEll ID.: LMW-21

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? NYTM X 2,206,950.31 NYTM Y 201,798.35 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?	X	
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: NA

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 110.5
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 43.20
MEASURE WELL DIAMETER (Inches): 2
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE: -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: -

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Grassy area in right of way along 3rd Ave

Sedimentation build up inside well casing and red ants.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Road, Recharge Basin

REMARKS:

New bolts needed. 1/4" poly bonded tubing left in well.

MONITORING WELL INSPECTION LOG

SKETCH

Appendix C

Site Inspection Form

AECOM

SITE INSPECTION FORM

Liberty Industrial Finishing Site
550 Suffolk Ave, Brentwood, Suffolk County, NY
NYSDEC Site ID # 1-52-108

Client: New York State Department of Environmental Conservation

Preparer's Name: Celeste Foster Date/Time: 11/14/2018, 09:00

Asphalt Cap

Has the condition of the asphalt degraded since the last inspection?	☐ YES	■ NO	☐ NA
Are any cracks visible in the asphalt pavement?	■ YES	☐ NO	☐ NA
Is there evidence of uneven settling and or ponding?	☐ YES	■ NO	☐ NA
Is there damage to any surface coverage?	☐ YES	■ NO	☐ NA

Fence

Are there any breaks in the perimeter fence?	■ YES	☐ NO	☐ NA
Are there any damaged or bent posts?	■ YES	☐ NO	☐ NA
Are the "No Trespassing" signs missing or damaged?	☐ YES	■ NO	☐ NA
Is the Suffolk Avenue gate damaged or bent?	☐ YES	■ NO	☐ NA
Is the Suffolk Avenue locked?	☐ YES	■ NO	☐ NA
Is the gate padlock damaged or in poor condition?	■ YES	☐ NO	☐ NA

Site Condition

Is there any evidence of illegal disposal?	■ YES	☐ NO	☐ NA
Is there uncontrolled vegetation growth?	■ YES	☐ NO	☐ NA
Is there any evidence of unauthorized entry?	■ YES	☐ NO	☐ NA

If yes to any question above, provide additional information below.

There are cracks in the asphalt pavement, there does not appear to be settling or ponding or damage to the surface coverage. The condition is the same as the last inspection.

Trash/debris has been scattered around the site.

The new owner has removed the gate and put large cement blocks which can be removed for heavy equipment entry.

The new owner has been clearing the Site but there is still uncontrolled vegetation.

PHOTOS:

PHOTOS:

PHOTOS:

Appendix D

Laboratory Data Summary Packages

Hampton-Clarke
Analytical & Field Services

175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004
2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
FAX: 973-244-9787
WWW.HCVLAB.COM

Project: Liberty

Client PO: 60277021

Report To: AECOM
100 Red School House Rd.
Suite B-1
Chestnut Ridge, NY 10977

Attn: Paul Kareth

Received Date: 11/15/2018

Report Date: 12/13/2018

Deliverables: NYDOH-CatA

Lab ID: AD07749

Lab Project No: 8111516

Robin Cousineau - Quality Assurance Director OR **Jean Revolus - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

NELAP ACCREDITED TNI LABORATORY

8111516

Hampton-Clarke

Analytical & Field Services

THIS CATEGORY "A" REPORT
IS NUMBERED FROM
1 to 147

HC Case Narrative

Client: AECOM
Project: Liberty

HC Project: 8111516

Hampton-Clarke (HC) received the following samples on 11/15/2018:

Client ID	HC Sample ID	Matrix	Analysis
LMW-2 U	AD07749-001	Aqueous	Metals (6010D/6020B/7470A)
LMW-2 F	AD07749-002	Aqueous	Metals (6010D/6020B/7470A)
LMW-3 U	AD07749-003	Aqueous	Metals (6010D/6020B/7470A)
LMW-3 F	AD07749-004	Aqueous	Metals (6010D/6020B/7470A)
LMW-4 U	AD07749-005	Aqueous	Metals (6010D/6020B/7470A)
LMW-4 F	AD07749-006	Aqueous	Metals (6010D/6020B/7470A)
LMW-5 U	AD07749-007	Aqueous	Metals (6010D/6020B/7470A)
LMW-5 F	AD07749-008	Aqueous	Metals (6010D/6020B/7470A)
LMW-6 U	AD07749-009	Aqueous	Metals (6010D/6020B/7470A)
LMW-6 F	AD07749-010	Aqueous	Metals (6010D/6020B/7470A)
LMW-7 U	AD07749-011	Aqueous	Metals (6010D/6020B/7470A)
LMW-7 F	AD07749-012	Aqueous	Metals (6010D/6020B/7470A)
LMW-10 U	AD07749-013	Aqueous	Metals (6010D/6020B/7470A)
LMW-10 F	AD07749-014	Aqueous	Metals (6010D/6020B/7470A)
LMW-12 U	AD07749-015	Aqueous	Metals (6010D/6020B/7470A)
LMW-12 U MS	AD07749-016	Aqueous	Metals (6010D/6020B/7470A)
LMW-12 U MSD	AD07749-017	Aqueous	Metals (6010D/6020B/7470A)
LMW-12 F	AD07749-018	Aqueous	Metals (6010D/6020B/7470A)
LMW-12 F MS	AD07749-019	Aqueous	Metals (6010D/6020B/7470A)
LMW-12 F MSD	AD07749-020	Aqueous	Metals (6010D/6020B/7470A)
LMW-14 U	AD07749-021	Aqueous	Metals (6010D/6020B/7470A)
LMW-14 F	AD07749-022	Aqueous	Metals (6010D/6020B/7470A)
LMW-64 U	AD07749-023	Aqueous	Metals (6010D/6020B/7470A)
LMW-64 F	AD07749-024	Aqueous	Metals (6010D/6020B/7470A)
LMW-16 U	AD07749-025	Aqueous	Metals (6010D/6020B/7470A)
LMW-16 F	AD07749-026	Aqueous	Metals (6010D/6020B/7470A)
LMW-17 U	AD07749-027	Aqueous	Metals (6010D/6020B/7470A)
LMW-17 F	AD07749-028	Aqueous	Metals (6010D/6020B/7470A)
LMW-18 U	AD07749-029	Aqueous	Metals (6010D/6020B/7470A)
LMW-18 F	AD07749-030	Aqueous	Metals (6010D/6020B/7470A)
LMW-19 U	AD07749-031	Aqueous	Metals (6010D/6020B/7470A)
LMW-19 F	AD07749-032	Aqueous	Metals (6010D/6020B/7470A)
LMW-20 U	AD07749-033	Aqueous	Metals (6010D/6020B/7470A)
LMW-20 F	AD07749-034	Aqueous	Metals (6010D/6020B/7470A)
LMW-21 U	AD07749-035	Aqueous	Metals (6010D/6020B/7470A)
LMW-21 F	AD07749-036	Aqueous	Metals (6010D/6020B/7470A)
FB-20181112	AD07749-037	Aqueous	Metals (6010D/6020B/7470A)

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Metals Analysis:

The Post Spike for batch 73003 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The serial dilution for batch 73002 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Robin Cousineau
Quality Assurance Director

Or

Jean Revolus
Laboratory Director

12/3/2018
Date

8111516 0002

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992
A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 8111516

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[X] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: AECOM
Address: 100 Red schoolhouse Rd Chestnut Ridge NY
1b) Email/Cell/Fax/Ph: Paul.Kareth@aecom.com
1c) Send Invoice to: Same as 1
1d) Send Report to: Same as 1

Project Information

2a) Project: Liberty
2b) Project Mgr: Paul Kareth
2c) Project Location (City/State): Brentwood NY
2d) Quote/PO # (If Applicable): 60277027

FOR LAB USE ONLY ↓
Batch # AD07749

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water; S - Soil; A - Air; GW - Ground Water; SL - Sludge; WW - Waste Water; OL - Oil; OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	TAL Metals	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001	LMW-2	GW	11/14/18	952		✓	✓							1		
002	LMW-2F			954		✓	✓							1		
003	LMW-3			1002		✓	✓							1		
004	LMW-3F			1004		✓	✓							1		
005	LMW-4			1022		✓	✓							1		
006	LMW-4F			1024		✓	✓							1		
007	LMW-5			1112		✓	✓							1		
008	LMW-5F			1114		✓	✓							1		
009	LMW-6			1100		✓	✓							1		
010	LMW-6F			1102		✓	✓							1		

10) Relinquished by:	Accepted by:	Date	Time
[signature]	[signature]	11/15/18	12:35
[signature]	[signature]	11/15/18	13:15

11) Sampler (print name): Celeste Foster Date: 11/14/18

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.4, 2.6, 2.7

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

8111516 0003

Hampton-Clarke, Inc. (WBE/DBE/SBE)
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke
A Women-Owned, Disadvantaged, Small Business Enterprise

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 8111516

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Customer Information

1a) Customer: AECOM
Address: 100 Redschool house Rd 10977
1b) Email/Cell/Fax/Ph: Paul.Kareth@aecom.com
1c) Send Invoice to: Same as ↑
1d) Send Report to: Same as ↑

Project Information

2a) Project: Liberty
2b) Project Mgr: Paul Kareth
2c) Project Location (City/State): Brentwood NY
2d) Quote/PO # (If Applicable): 60277027

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.) (circled)	NY ASP CatA (circled)	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓
Batch #: AD07749

Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

===> Check If Contingent ===> 7) Analysis (specify methods & parameter lists) <=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	TAL Metals	None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
011	LMW-7	GW	11/13/18	1001		✓	✓							1		
012	LMW-7F	↓	11/13/18	1003		✓	✓							1		
013	LMW-10	↓	11/12/18	1215		✓	✓							1		
014	LMW-10F	↓	↓	1217		✓	✓							1		
017/016/015	LMW-12	↓	↓	945		✓	✓							1		
020/019/018	LMW-12F	↓	↓	947		✓	✓							3		+MS/MSD
021	LMW-14	↓	↓	935		✓	✓							3		+MS/MSD
022	LMW-14F	↓	↓	938		✓	✓							1		
023	LMW-64	↓	↓	1110		✓	✓							1		
024	LMW-64F	↓	↓	1112		✓	✓							1		

10) Relinquished by:	Accepted by:	Date	Time
[signature]	[signature]	11/15/18	12:35
[signature]	[signature]	11/15/18	13:15

11) Sampler (print name): Celeste Foster Date: 11/14/18

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
[ ] BN or BNA (8270D SIM)
[ ] VOC (8260C SIM or 8011)
[ ] SPLP (BN, BNA, Metals)
[ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
[ ] NJDEP GWQS
[ ] NJDEP SRS
[ ] NJDEP SPLP
[ ] Other (specify):

Check if applicable:
[ ] Project-Specific Reporting Limits
[ ] High Contaminant Concentrations
[ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.9, 2.6, 2.7

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

8111516 0004

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
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Hampton-Clarke WBE/DBE/SBE 800-426-9992

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NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 8111516

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When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
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3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

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2c) Project Location (City/State): Brentwood NY
2d) Quote/PO # (If Applicable): 60277027

FOR LAB USE ONLY ↓

Batch # A807749

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water; S - Soil; A - Air; GW - Ground Water; SL - Sludge; WW - Waste Water; OL - Oil; OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	TAL Metals	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
025	LMW-16	GW	11/12/18	1210		✓	✓							1		Q has 11/12/18
026	LMW-16F		11/12/18	1212		✓	✓							1		11/12/18
027	LMW-17		11/13/18	1000		✓	✓							1		11/13/18
028	LMW-17F		11/13/18	1002		✓	✓							1		11/13/18
029	LMW-18		11/13/18	1250		✓	✓							1		11/13/18
030	LMW-18F		11/13/18	1252		✓	✓							1		11/13/18
031	LMW-19		11/13/18	1240		✓	✓							1		11/13/18
032	LMW-19F		11/13/18	1242		✓	✓							1		11/13/18
033	LMW-20		11/12/18	1400		✓	✓							1		11/12/18
034	LMW-20F	✓	11/12/18	1402		✓	✓							1		11/12/18

10) Relinquished by:	Accepted by:	Date	Time
		11/15/18	12:35
		11/15/18	13:15

11) Sampler (print name): Celeste Foster Date: 11/14/18

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.9, 2.6, 2.7

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

8111516 0005

Hampton-Clarke, Inc. (WBE/DBE/SBE)
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

HC Hampton-Clarke

A Women-Owned, Disadvantaged, Small Business Enterprise

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 8111516

Page 4 of 4

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Customer Information

1a) Customer: AECOM
Address: 100 Red Schoolhouse Rd 10977
1b) Email/Cell/Fax/Ph: Paul.Kareth@aecom.com
1c) Send Invoice to: Same as ↑
1d) Send Report to: Same as ↑

Project Information

2a) Project: Liberty
2b) Project Mgr: Paul Kareth
2c) Project Location (City/State): Brentwood NY
2d) Quote/PO # (If Applicable): 60277021

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
~~5 Business Days (25%)~~	~~NJ Full / NY ASP CatB~~	[X] NYDEC
(8) Business Days (Stand.) (circled)	(NY ASP CatA) (circled)	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓
Batch #: AD0774G

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	7) Analysis: TAL Metals	None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
035	LMW-21	GW	11/12/18	1340		✓	✓							1		
036	LMW-21F	↓	↓	1342		✓	✓							1		
037	FB-20181112	FB	↓	0910		✓	✓							1		

7) Analysis (specify methods & parameter lists) <=== Check If Contingent <===
8) # of Bottles

10) Relinquished by:	Accepted by:	Date	Time
[signature]	[signature]	11/15/18	12:25
[signature]	[signature]	11/15/18	13:15

11) Sampler (print name): Celeste Foster Date: 11/14/18

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.9/2.6, 2.7

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

PROJECT MODIFICATIONS

Client: AECOM-CRNY **HC Project #:** 8111516
Project: Liberty

---

sherree192.168.1.210
11/16/2018 8:48:55 AM

Per Celeste Foster, 12 and 12F are the MS/MSD. SB 11/16/18

CONDITION UPON RECEIPT

Batch Number AD07749 Entered By: maxwell
Date Entered 11/15/2018 2:27:00 PM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	No	Are the COC seals intact?
4	T0056	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 2.4,2.6,2.7
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	No	Do the contents match the COC? If no, specify MS/MSD samples were received only for samples LMW-12 and LMW-12F.
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify
14	NA	Corrective actions (Specify item number and corrective action taken).

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD07749-001	11/15/18 13:15	MAXW	0	M	Received
AD07749-001	11/15/18 14:23	MAXW	0	M	Login
AD07749-001	11/15/18 14:23	R12	1	A	NONE
AD07749-001	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-001	11/21/18 14:02	R12	1	A	NONE
AD07749-002	11/15/18 13:15	MAXW	0	M	Received
AD07749-002	11/15/18 14:23	MAXW	0	M	Login
AD07749-002	11/15/18 14:23	R12	1	A	NONE
AD07749-002	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-002	11/21/18 14:05	R12	1	A	NONE
AD07749-003	11/15/18 13:15	MAXW	0	M	Received
AD07749-003	11/15/18 14:23	MAXW	0	M	Login
AD07749-003	11/15/18 14:23	R12	1	A	NONE
AD07749-003	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-003	11/21/18 14:02	R12	1	A	NONE
AD07749-004	11/15/18 13:15	MAXW	0	M	Received
AD07749-004	11/15/18 14:23	MAXW	0	M	Login
AD07749-004	11/15/18 14:23	R12	1	A	NONE
AD07749-004	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-004	11/21/18 14:05	R12	1	A	NONE
AD07749-005	11/15/18 13:15	MAXW	0	M	Received
AD07749-005	11/15/18 14:23	MAXW	0	M	Login
AD07749-005	11/15/18 14:23	R12	1	A	NONE
AD07749-005	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-005	11/21/18 14:02	R12	1	A	NONE
AD07749-006	11/15/18 13:15	MAXW	0	M	Received
AD07749-006	11/15/18 14:23	MAXW	0	M	Login
AD07749-006	11/15/18 14:23	R12	1	A	NONE
AD07749-006	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-006	11/21/18 14:05	R12	1	A	NONE
AD07749-007	11/15/18 13:15	MAXW	0	M	Received
AD07749-007	11/15/18 14:23	MAXW	0	M	Login
AD07749-007	11/15/18 14:23	R12	1	A	NONE
AD07749-007	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-007	11/21/18 14:02	R12	1	A	NONE
AD07749-008	11/15/18 13:15	MAXW	0	M	Received
AD07749-008	11/15/18 14:23	MAXW	0	M	Login
AD07749-008	11/15/18 14:23	R12	1	A	NONE
AD07749-008	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-008	11/21/18 14:05	R12	1	A	NONE
AD07749-009	11/15/18 13:15	MAXW	0	M	Received
AD07749-009	11/15/18 14:23	MAXW	0	M	Login
AD07749-009	11/15/18 14:23	R12	1	A	NONE
AD07749-009	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-009	11/21/18 14:02	R12	1	A	NONE
AD07749-010	11/15/18 13:15	MAXW	0	M	Received
AD07749-010	11/15/18 14:23	MAXW	0	M	Login
AD07749-010	11/15/18 14:23	R12	1	A	NONE
AD07749-010	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-010	11/21/18 14:05	R12	1	A	NONE
AD07749-011	11/15/18 13:15	MAXW	0	M	Received
AD07749-011	11/15/18 14:23	MAXW	0	M	Login
AD07749-011	11/15/18 14:23	R12	1	A	NONE
AD07749-011	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-011	11/21/18 14:02	R12	1	A	NONE
AD07749-012	11/15/18 13:15	MAXW	0	M	Received
AD07749-012	11/15/18 14:23	MAXW	0	M	Login
AD07749-012	11/15/18 14:23	R12	1	A	NONE
AD07749-012	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-012	11/21/18 14:05	R12	1	A	NONE
AD07749-013	11/15/18 13:15	MAXW	0	M	Received
AD07749-013	11/15/18 14:23	MAXW	0	M	Login
AD07749-013	11/15/18 14:23	R12	1	A	NONE
AD07749-013	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-013	11/21/18 14:02	R12	1	A	NONE
AD07749-014	11/15/18 13:15	MAXW	0	M	Received
AD07749-014	11/15/18 14:23	MAXW	0	M	Login
AD07749-014	11/15/18 14:23	R12	1	A	NONE
AD07749-014	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-014	11/21/18 14:05	R12	1	A	NONE
AD07749-015	11/15/18 13:15	MAXW	0	M	Received
AD07749-015	11/15/18 14:23	MAXW	0	M	Login
AD07749-015	11/15/18 14:23	R12	1	A	NONE
AD07749-015	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-015	11/21/18 14:02	R12	1	A	NONE
AD07749-016	11/15/18 13:15	MAXW	0	M	Received
AD07749-016	11/15/18 14:23	MAXW	0	M	Login
AD07749-016	11/15/18 14:23	R12	1	A	NONE
AD07749-016	11/21/18 11:01	CJA	2	M	TDWI-HG
AD07749-016	11/21/18 14:02	R12	2	A	NONE
AD07749-017	11/15/18 13:15	MAXW	0	M	Received
AD07749-017	11/15/18 14:23	MAXW	0	M	Login
AD07749-017	11/15/18 14:23	R12	1	A	NONE
AD07749-017	11/21/18 11:01	CJA	2	M	TDWI-HG
AD07749-017	11/21/18 14:02	R12	2	A	NONE
AD07749-018	11/15/18 13:15	MAXW	0	M	Received
AD07749-018	11/15/18 14:23	MAXW	0	M	Login
AD07749-018	11/15/18 14:23	R12	1	A	NONE
AD07749-018	11/21/18 11:04	CJA	2	M	TDWI-HG
AD07749-018	11/21/18 14:05	R12	2	A	NONE
AD07749-019	11/15/18 13:15	MAXW	0	M	Received
AD07749-019	11/15/18 14:23	MAXW	0	M	Login
AD07749-019	11/15/18 14:23	R12	1	A	NONE
AD07749-019	11/21/18 11:04	CJA	2	M	TDWI-HG
AD07749-019	11/21/18 14:05	R12	2	A	NONE
AD07749-020	11/15/18 13:15	MAXW	0	M	Received
AD07749-020	11/15/18 14:23	MAXW	0	M	Login
AD07749-020	11/15/18 14:23	R12	1	A	NONE
AD07749-020	11/21/18 11:04	CJA	2	M	TDWI-HG
AD07749-020	11/21/18 14:05	R12	2	A	NONE
AD07749-021	11/15/18 13:15	MAXW	0	M	Received
AD07749-021	11/15/18 14:23	MAXW	0	M	Login
AD07749-021	11/15/18 14:23	R12	1	A	NONE
AD07749-021	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-021	11/21/18 14:02	R12	1	A	NONE
AD07749-022	11/15/18 13:15	MAXW	0	M	Received
AD07749-022	11/15/18 14:23	MAXW	0	M	Login
AD07749-022	11/15/18 14:23	R12	1	A	NONE
AD07749-022	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-022	11/21/18 14:05	R12	1	A	NONE
AD07749-023	11/15/18 13:15	MAXW	0	M	Received
AD07749-023	11/15/18 14:23	MAXW	0	M	Login
AD07749-023	11/15/18 14:23	R12	1	A	NONE
AD07749-023	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-023	11/21/18 14:02	R12	1	A	NONE
AD07749-024	11/15/18 13:15	MAXW	0	M	Received
AD07749-024	11/15/18 14:23	MAXW	0	M	Login
AD07749-024	11/15/18 14:23	R12	1	A	NONE
AD07749-024	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-024	11/21/18 14:05	R12	1	A	NONE
AD07749-025	11/15/18 13:15	MAXW	0	M	Received
AD07749-025	11/15/18 14:23	MAXW	0	M	Login
AD07749-025	11/15/18 14:23	R12	1	A	NONE
AD07749-025	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-025	11/21/18 14:02	R12	1	A	NONE
AD07749-026	11/15/18 13:15	MAXW	0	M	Received
AD07749-026	11/15/18 14:23	MAXW	0	M	Login
AD07749-026	11/15/18 14:23	R12	1	A	NONE
AD07749-026	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-026	11/21/18 14:05	R12	1	A	NONE
AD07749-027	11/15/18 13:15	MAXW	0	M	Received
AD07749-027	11/15/18 14:23	MAXW	0	M	Login
AD07749-027	11/15/18 14:23	R12	1	A	NONE
AD07749-027	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-027	11/21/18 14:02	R12	1	A	NONE
AD07749-028	11/15/18 13:15	MAXW	0	M	Received
AD07749-028	11/15/18 14:23	MAXW	0	M	Login
AD07749-028	11/15/18 14:23	R12	1	A	NONE
AD07749-028	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-028	11/21/18 14:05	R12	1	A	NONE
AD07749-029	11/15/18 13:15	MAXW	0	M	Received
AD07749-029	11/15/18 14:23	MAXW	0	M	Login
AD07749-029	11/15/18 14:23	R12	1	A	NONE
AD07749-029	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-029	11/21/18 14:02	R12	1	A	NONE
AD07749-030	11/15/18 13:15	MAXW	0	M	Received
AD07749-030	11/15/18 14:23	MAXW	0	M	Login
AD07749-030	11/15/18 14:23	R12	1	A	NONE
AD07749-030	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-030	11/21/18 14:05	R12	1	A	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD07749-031	11/15/18 13:15	MAXW	0	M	Received
AD07749-031	11/15/18 14:23	MAXW	0	M	Login
AD07749-031	11/15/18 14:23	R12	1	A	NONE
AD07749-031	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-031	11/21/18 14:02	R12	1	A	NONE
AD07749-032	11/15/18 13:15	MAXW	0	M	Received
AD07749-032	11/15/18 14:23	MAXW	0	M	Login
AD07749-032	11/15/18 14:23	R12	1	A	NONE
AD07749-032	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-032	11/21/18 14:05	R12	1	A	NONE
AD07749-033	11/15/18 13:15	MAXW	0	M	Received
AD07749-033	11/15/18 14:23	MAXW	0	M	Login
AD07749-033	11/15/18 14:23	R12	1	A	NONE
AD07749-033	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-033	11/21/18 14:02	R12	1	A	NONE
AD07749-034	11/15/18 13:15	MAXW	0	M	Received
AD07749-034	11/15/18 14:23	MAXW	0	M	Login
AD07749-034	11/15/18 14:23	R12	1	A	NONE
AD07749-034	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-034	11/21/18 14:05	R12	1	A	NONE
AD07749-035	11/15/18 13:15	MAXW	0	M	Received
AD07749-035	11/15/18 14:23	MAXW	0	M	Login
AD07749-035	11/15/18 14:23	R12	1	A	NONE
AD07749-035	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-035	11/21/18 14:02	R12	1	A	NONE
AD07749-036	11/15/18 13:15	MAXW	0	M	Received
AD07749-036	11/15/18 14:23	MAXW	0	M	Login
AD07749-036	11/15/18 14:23	R12	1	A	NONE
AD07749-036	11/21/18 11:04	CJA	1	M	TDWI-HG
AD07749-036	11/21/18 14:05	R12	1	A	NONE
AD07749-037	11/15/18 13:15	MAXW	0	M	Received
AD07749-037	11/15/18 14:23	MAXW	0	M	Login
AD07749-037	11/15/18 14:23	R12	1	A	NONE
AD07749-037	11/21/18 11:01	CJA	1	M	TDWI-HG
AD07749-037	11/21/18 14:02	R12	1	A	NONE
AD07749-037	11/28/18 12:14	R12	1	A	NONE

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Laboratory Chronicle

Client: AECOM
Project: Liberty

HC Project #: 8111516

Lab#: AD07749-001 **Sample ID: LMW-2 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 15:40	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 17:09	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 20:22	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 16:22	PC

Lab#: AD07749-002 **Sample ID: LMW-2 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:07	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 14:01	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 17:51	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 00:13	PC

Lab#: AD07749-003 **Sample ID: LMW-3 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 15:42	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 17:13	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 20:26	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 16:27	PC

Lab#: AD07749-004 **Sample ID: LMW-3 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:09	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 14:05	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 17:55	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 00:18	PC

Laboratory Chronicle

Client: AECOM
Project: Liberty

HC Project #: 8111516

Lab#: AD07749-005 **Sample ID: LMW-4 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 15:46	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 17:17	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 20:30	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 16:32	PC

Lab#: AD07749-006 **Sample ID: LMW-4 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:10	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 14:09	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 17:59	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 00:22	PC

Lab#: AD07749-007 **Sample ID: LMW-5 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 15:47	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 20:33	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 17:22	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 16:36	PC

Lab#: AD07749-008 **Sample ID: LMW-5 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:15	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 14:13	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 18:03	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 00:27	PC

Laboratory Chronicle

Client: AECOM
Project: Liberty

HC Project #: 8111516

Lab#: AD07749-009 **Sample ID: LMW-6 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 15:49	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 17:26	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 20:37	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 16:41	PC

Lab#: AD07749-010 **Sample ID: LMW-6 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:16	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 18:07	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 14:17	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 00:31	PC

Lab#: AD07749-011 **Sample ID: LMW-7 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 15:50	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 17:30	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 20:41	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 16:45	PC

Lab#: AD07749-012 **Sample ID: LMW-7 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:17	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 14:20	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 18:11	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 00:36	PC

Laboratory Chronicle

Client: AECOM
Project: Liberty

HC Project #: 8111516

Lab#: AD07749-013 **Sample ID: LMW-10 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 15:51	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 17:34	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 20:45	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 16:50	PC

Lab#: AD07749-014 **Sample ID: LMW-10 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:19	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 18:15	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 14:24	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 00:41	PC

Lab#: AD07749-015 **Sample ID: LMW-12 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 15:34	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 16:31	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 19:45	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 15:40	PC

Lab#: AD07749-016 **Sample ID: LMW-12 U MS**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 15:37	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 16:39	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 19:53	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 15:53	PC

Laboratory Chronicle

Client: AECOM
Project: Liberty

HC Project #: 8111516

Lab#: AD07749-017 **Sample ID: LMW-12 U MSD**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 15:39	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 19:59	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 16:45	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 15:59	PC

Lab#: AD07749-018 **Sample ID: LMW-12 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:01	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 13:25	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 17:13	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 23:32	PC

Lab#: AD07749-019 **Sample ID: LMW-12 F MS**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:04	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 17:21	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 13:33	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 23:46	PC

Lab#: AD07749-020 **Sample ID: LMW-12 F MSD**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:05	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 13:38	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 17:27	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 23:50	PC

Laboratory Chronicle

Client: AECOM
Project: Liberty

HC Project #: 8111516

Lab#: AD07749-021 **Sample ID: LMW-14 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 15:53	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 20:48	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 17:38	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 16:55	PC

Lab#: AD07749-022 **Sample ID: LMW-14 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:20	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 14:37	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 18:29	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 00:45	PC

Lab#: AD07749-023 **Sample ID: LMW-64 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 15:54	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 17:51	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 21:01	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 16:59	PC

Lab#: AD07749-024 **Sample ID: LMW-64 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:21	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 14:41	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 18:33	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 00:50	PC

Laboratory Chronicle

Client: AECOM
Project: Liberty

HC Project #: 8111516

Lab#: AD07749-025 **Sample ID: LMW-16 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 15:55	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 17:55	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 21:05	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 17:18	PC

Lab#: AD07749-026 **Sample ID: LMW-16 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:23	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 14:44	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 18:37	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 01:08	PC

Lab#: AD07749-027 **Sample ID: LMW-17 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 15:57	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 17:59	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 21:09	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 17:22	PC

Lab#: AD07749-028 **Sample ID: LMW-17 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:24	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 18:41	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 14:48	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 01:13	PC

Laboratory Chronicle

Client: AECOM
Project: Liberty

HC Project #: 8111516

Lab#: AD07749-029 **Sample ID: LMW-18 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:01	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 18:04	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 21:14	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 17:27	PC

Lab#: AD07749-030 **Sample ID: LMW-18 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:25	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 14:52	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 18:45	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 01:18	PC

Lab#: AD07749-031 **Sample ID: LMW-19 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:03	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 21:18	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 18:08	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 17:31	PC

Lab#: AD07749-032 **Sample ID: LMW-19 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:27	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 14:56	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 18:49	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 01:22	PC

Laboratory Chronicle

Client: AECOM
Project: Liberty

HC Project #: 8111516

Lab#: AD07749-033 **Sample ID: LMW-20 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:04	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 21:21	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 18:12	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 17:36	PC

Lab#: AD07749-034 **Sample ID: LMW-20 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:31	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 15:00	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 18:53	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 01:27	PC

Lab#: AD07749-035 **Sample ID: LMW-21 U**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:05	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 18:18	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 21:26	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 17:41	PC

Lab#: AD07749-036 **Sample ID: LMW-21 F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:33	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 15:03	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/27/18 18:57	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/28/18 01:32	PC

Laboratory Chronicle

Client: AECOM
Project: Liberty

HC Project #: 8111516

Lab#: AD07749-037 **Sample ID: FB-20181112**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	11/21/18 11:00	carmela	EPA 7470A	11/29/18 16:06	OA
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 18:22	SRB
TAL Metals 6010D	3005&10/3050	11/21/18 11:00	carmela	EPA 6010D	11/21/18 21:30	SRB
TAL Metals 6020B	3005&10/3050	11/21/18 11:00	carmela	EPA 6020B	11/27/18 17:45	PC

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

MDL = Method Detection Limit

RL* = Reporting Limit

ND = Not Detected

RT = Retention Time

NA = Not Applicable

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

HC Report of Analysis

Client: AECOM
Project: Liberty

HC Project #: 8111516

Sample ID: LMW-2 U
Lab#: AD07749-001
Matrix: Aqueous

Collection Date: 11/14/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**22000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**14000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-2 F
Lab#: AD07749-002
Matrix: Aqueous

Collection Date: 11/14/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**21000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**14000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-3 U
Lab#: AD07749-003
Matrix: Aqueous

Collection Date: 11/14/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**730**
Barium	**1**	**ug/l**	**50**	**65**
Calcium	**1**	**ug/l**	**5000**	**17000**
Chromium	**1**	**ug/l**	**50**	**52**
Copper	**1**	**ug/l**	**50**	**58**
Iron	**1**	**ug/l**	**300**	**1000**
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**25000**
Vanadium	1	ug/l	50	ND
Zinc	**1**	**ug/l**	**50**	**88**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**5.0**
Cobalt	1	ug/l	2.0	ND
Lead	**1**	**ug/l**	**3.0**	**12**
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-3 F
Lab#: AD07749-004
Matrix: Aqueous

Collection Date: 11/14/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**16000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**23000**
Vanadium	1	ug/l	50	ND
Zinc	**1**	**ug/l**	**50**	**63**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**3.8**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-4 U
Lab#: AD07749-005
Matrix: Aqueous

Collection Date: 11/14/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**1400**
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**33000**
Chromium	**1**	**ug/l**	**50**	**100**
Copper	**1**	**ug/l**	**50**	**110**
Iron	**1**	**ug/l**	**300**	**1400**
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**6300**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**9600**
Vanadium	1	ug/l	50	ND
Zinc	**1**	**ug/l**	**50**	**430**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**98**
Cobalt	1	ug/l	2.0	ND
Lead	**1**	**ug/l**	**3.0**	**15**
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-4 F
Lab#: AD07749-006
Matrix: Aqueous
Collection Date: 11/14/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**29000**
Chromium	1	ug/l	50	ND
Copper	**1**	**ug/l**	**50**	**56**
Iron	**1**	**ug/l**	**300**	**340**
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**5100**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**8300**
Vanadium	1	ug/l	50	ND
Zinc	**1**	**ug/l**	**50**	**260**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**83**
Cobalt	1	ug/l	2.0	ND
Lead	**1**	**ug/l**	**3.0**	**3.1**
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-5 U
Lab#: AD07749-007
Matrix: Aqueous

Collection Date: 11/14/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**20000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**7800**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**10000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-5 F
Lab#: AD07749-008
Matrix: Aqueous

Collection Date: 11/14/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**20000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**7700**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**11000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-6 U
Lab#: AD07749-009
Matrix: Aqueous

Collection Date: 11/14/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**9800**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**11000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-6 F
Lab#: AD07749-010
Matrix: Aqueous

Collection Date: 11/14/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**9500**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**11000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-7 U
Lab#: AD07749-011
Matrix: Aqueous

Collection Date: 11/13/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**390**
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**13000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**18000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**2.2**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-7 F
Lab#: AD07749-012
Matrix: Aqueous

Collection Date: 11/13/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**11000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**16000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-10 U
Lab#: AD07749-013
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**29000**
Chromium	**1**	**ug/l**	**50**	**120**
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**13000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**57**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-10 F
Lab#: AD07749-014
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**27000**
Chromium	**1**	**ug/l**	**50**	**110**
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**12000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**60**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-12 U
Lab#: AD07749-015
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**45000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**430**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**82**
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**5300**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**27000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-12 U MS
Lab#: AD07749-016
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	10

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	5500
Barium	1	ug/l	50	560
Calcium	1	ug/l	5000	97000
Chromium	1	ug/l	50	540
Copper	1	ug/l	50	550
Iron	1	ug/l	300	5800
Magnesium	1	ug/l	5000	57000
Manganese	1	ug/l	40	630
Nickel	1	ug/l	50	540
Potassium	1	ug/l	5000	58000
Silver	1	ug/l	20	110
Sodium	1	ug/l	5000	79000
Vanadium	1	ug/l	50	540
Zinc	1	ug/l	50	550

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	490
Arsenic	1	ug/l	2.0	500
Beryllium	1	ug/l	1.0	440
Cadmium	1	ug/l	2.0	500
Cobalt	1	ug/l	2.0	490
Lead	1	ug/l	3.0	490
Selenium	1	ug/l	10	480
Thallium	1	ug/l	2.0	500

Sample ID: LMW-12 U MSD
Lab#: AD07749-017
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	11

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	5400
Barium	1	ug/l	50	550
Calcium	1	ug/l	5000	96000
Chromium	1	ug/l	50	530
Copper	1	ug/l	50	540
Iron	1	ug/l	300	5800
Magnesium	1	ug/l	5000	56000
Manganese	1	ug/l	40	610
Nickel	1	ug/l	50	530
Potassium	1	ug/l	5000	58000
Silver	1	ug/l	20	110
Sodium	1	ug/l	5000	79000
Vanadium	1	ug/l	50	530
Zinc	1	ug/l	50	530

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	530
Arsenic	1	ug/l	2.0	540
Beryllium	1	ug/l	1.0	480
Cadmium	1	ug/l	2.0	540
Cobalt	1	ug/l	2.0	540
Lead	1	ug/l	3.0	540
Selenium	1	ug/l	10	510
Thallium	1	ug/l	2.0	540

Sample ID: LMW-12 F
Lab#: AD07749-018
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**46000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**310**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**82**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**28000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-12 F MS
Lab#: AD07749-019
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	10

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	5400
Barium	1	ug/l	50	560
Calcium	1	ug/l	5000	95000
Chromium	1	ug/l	50	540
Copper	1	ug/l	50	550
Iron	1	ug/l	300	5700
Magnesium	1	ug/l	5000	57000
Manganese	1	ug/l	40	600
Nickel	1	ug/l	50	550
Potassium	1	ug/l	5000	57000
Silver	1	ug/l	20	110
Sodium	1	ug/l	5000	77000
Vanadium	1	ug/l	50	540
Zinc	1	ug/l	50	550

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	540
Arsenic	1	ug/l	2.0	550
Beryllium	1	ug/l	1.0	490
Cadmium	1	ug/l	2.0	550
Cobalt	1	ug/l	2.0	560
Lead	1	ug/l	3.0	540
Selenium	1	ug/l	10	520
Thallium	1	ug/l	2.0	550

Sample ID: LMW-12 F MSD
Lab#: AD07749-020
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	10

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	5300
Barium	1	ug/l	50	540
Calcium	1	ug/l	5000	94000
Chromium	1	ug/l	50	520
Copper	1	ug/l	50	530
Iron	1	ug/l	300	5800
Magnesium	1	ug/l	5000	56000
Manganese	1	ug/l	40	600
Nickel	1	ug/l	50	530
Potassium	1	ug/l	5000	58000
Silver	1	ug/l	20	100
Sodium	1	ug/l	5000	78000
Vanadium	1	ug/l	50	520
Zinc	1	ug/l	50	530

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	520
Arsenic	1	ug/l	2.0	530
Beryllium	1	ug/l	1.0	470
Cadmium	1	ug/l	2.0	520
Cobalt	1	ug/l	2.0	540
Lead	1	ug/l	3.0	510
Selenium	1	ug/l	10	490
Thallium	1	ug/l	2.0	520

Sample ID: LMW-14 U
Lab#: AD07749-021
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**1400**
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**12000**
Chromium	**1**	**ug/l**	**50**	**120**
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**1600**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**58**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**13000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**9.1**
Cobalt	1	ug/l	2.0	ND
Lead	**1**	**ug/l**	**3.0**	**11**
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-14 F
Lab#: AD07749-022
Matrix: Aqueous
Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**11000**
Chromium	**1**	**ug/l**	**50**	**63**
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**52**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**12000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**8.6**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-64 U
Lab#: AD07749-023
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**2600**
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**10000**
Chromium	**1**	**ug/l**	**50**	**160**
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**2700**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**45**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**13000**
Vanadium	1	ug/l	50	ND
Zinc	**1**	**ug/l**	**50**	**68**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**8.8**
Cobalt	1	ug/l	2.0	ND
Lead	**1**	**ug/l**	**3.0**	**21**
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-64 F
Lab#: AD07749-024
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**9900**
Chromium	**1**	**ug/l**	**50**	**56**
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**44**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**11000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**7.9**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-16 U
Lab#: AD07749-025
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**2900**
Barium	**1**	**ug/l**	**50**	**170**
Calcium	**1**	**ug/l**	**5000**	**11000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**4000**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**1200**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**12000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	**1**	**ug/l**	**1.0**	**1.0**
Cadmium	**1**	**ug/l**	**2.0**	**5.5**
Cobalt	**1**	**ug/l**	**2.0**	**2.2**
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-16 F
Lab#: AD07749-026
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**400**
Barium	**1**	**ug/l**	**50**	**160**
Calcium	**1**	**ug/l**	**5000**	**12000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**1100**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**12000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**5.7**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-17 U
Lab#: AD07749-027
Matrix: Aqueous

Collection Date: 11/13/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**5700**
Barium	**1**	**ug/l**	**50**	**75**
Calcium	**1**	**ug/l**	**5000**	**31000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**7700**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**930**
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**6500**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**23000**
Vanadium	1	ug/l	50	ND
Zinc	**1**	**ug/l**	**50**	**600**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	**1**	**ug/l**	**2.0**	**2.9**
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**25**
Cobalt	**1**	**ug/l**	**2.0**	**2.8**
Lead	**1**	**ug/l**	**3.0**	**49**
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-17 F
Lab#: AD07749-028
Matrix: Aqueous

Collection Date: 11/13/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	**1**	**ug/l**	**50**	**53**
Calcium	**1**	**ug/l**	**5000**	**32000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**1800**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**940**
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**6400**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**24000**
Vanadium	1	ug/l	50	ND
Zinc	**1**	**ug/l**	**50**	**260**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**3.6**
Cobalt	1	ug/l	2.0	ND
Lead	**1**	**ug/l**	**3.0**	**3.2**
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-18 U
Lab#: AD07749-029
Matrix: Aqueous

Collection Date: 11/13/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	**1**	**ug/l**	**50**	**100**
Calcium	**1**	**ug/l**	**5000**	**21000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	**1**	**ug/l**	**5000**	**5600**
Manganese	**1**	**ug/l**	**40**	**1200**
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**6300**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**26000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-18 F
Lab#: AD07749-030
Matrix: Aqueous

Collection Date: 11/13/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	**1**	**ug/l**	**50**	**92**
Calcium	**1**	**ug/l**	**5000**	**20000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	**1**	**ug/l**	**5000**	**5500**
Manganese	**1**	**ug/l**	**40**	**940**
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**5800**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**24000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-19 U
Lab#: AD07749-031
Matrix: Aqueous

Collection Date: 11/13/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**11000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**14000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-19 F
Lab#: AD07749-032
Matrix: Aqueous

Collection Date: 11/13/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**11000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**14000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-20 U
Lab#: AD07749-033
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**19000**
Barium	**1**	**ug/l**	**50**	**150**
Calcium	**1**	**ug/l**	**5000**	**21000**
Chromium	**1**	**ug/l**	**50**	**72**
Copper	**1**	**ug/l**	**50**	**63**
Iron	**1**	**ug/l**	**300**	**34000**
Magnesium	**1**	**ug/l**	**5000**	**10000**
Manganese	**1**	**ug/l**	**40**	**1100**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**19000**
Vanadium	**1**	**ug/l**	**50**	**57**
Zinc	**1**	**ug/l**	**50**	**340**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	**1**	**ug/l**	**2.0**	**11**
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	**1**	**ug/l**	**2.0**	**10**
Lead	**1**	**ug/l**	**3.0**	**27**
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-20 F
Lab#: AD07749-034
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**560**
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**14000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**570**
Magnesium	**1**	**ug/l**	**5000**	**6900**
Manganese	**1**	**ug/l**	**40**	**62**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**18000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-21 U
Lab#: AD07749-035
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**2500**
Barium	**1**	**ug/l**	**50**	**92**
Calcium	**1**	**ug/l**	**5000**	**16000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**3900**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**320**
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**6700**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**23000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	**1**	**ug/l**	**3.0**	**7.0**
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-21 F
Lab#: AD07749-036
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	**1**	**ug/l**	**50**	**84**
Calcium	**1**	**ug/l**	**5000**	**18000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**580**
Magnesium	**1**	**ug/l**	**5000**	**5000**
Manganese	**1**	**ug/l**	**40**	**130**
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**7100**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**25000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: FB-20181112
Lab#: AD07749-037
Matrix: Aqueous

Collection Date: 11/12/2018
Receipt Date: 11/15/2018

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	ND
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 73002 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 73002 Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-36-0	Antimony	1.5	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-38-2	Arsenic	1.0	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-41-7	Beryllium	0.50	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-43-9	Cadmium	1.0	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-70-2	Calcium	250	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-47-3	Chromium	1.0	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-48-4	Cobalt	1.0	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-50-8	Copper	5.0	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7439-89-6	Iron	150	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7439-92-1	Lead	1.5	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7439-95-4	Magnesium	250	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7439-96-5	Manganese	3.0	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7439-98-7	Molybdenum	1.0	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-02-0	Nickel	1.5	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-09-7	Potassium	250	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7782-49-2	Selenium	5.0	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-22-4	Silver	0.50	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-23-5	Sodium	250	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-28-0	Thallium	1.0	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-62-2	Vanadium	1.0	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA
7440-66-6	Zinc	10	ND	1	50	100	11/27/18	73002	2718BNEW	17	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 73002 (1) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 73002 (1) Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7440-39-3	Barium	25	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7440-42-8	Boron	100	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7440-70-2	Calcium	2500	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7440-47-3	Chromium	25	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7440-50-8	Copper	25	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7439-89-6	Iron	150	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7439-95-4	Magnesium	2500	ND	1	50	50	11/21/18	73002	SW23443B2	13	P	PEICPRAD2A
7439-96-5	Manganese	20	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	11	CV	HGCV3A
7439-98-7	Molybdenum	10	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7440-02-0	Nickel	25	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7440-09-7	Potassium	2500	ND	1	50	50	11/21/18	73002	SW23443B2	13	P	PEICPRAD2A
7440-21-3	Silicon	50	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7440-22-4	Silver	10	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7440-23-5	Sodium	2500	ND	1	50	50	11/21/18	73002	SW23443B2	13	P	PEICPRAD2A
7440-31-5	Tin	25	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7440-32-6	Titanium	25	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7440-62-2	Vanadium	25	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A
7440-66-6	Zinc	25	ND	1	50	50	11/21/18	73002	SW23443A2	13	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 73003 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 73003 Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-36-0	Antimony	1.5	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-38-2	Arsenic	1.0	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-41-7	Beryllium	0.50	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-43-9	Cadmium	1.0	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-70-2	Calcium	250	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-47-3	Chromium	1.0	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-48-4	Cobalt	1.0	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-50-8	Copper	5.0	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7439-92-1	Lead	1.5	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7439-95-4	Magnesium	250	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7439-96-5	Manganese	3.0	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7439-98-7	Molybdenum	1.0	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-02-0	Nickel	1.5	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-09-7	Potassium	250	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7782-49-2	Selenium	5.0	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-22-4	Silver	0.50	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-23-5	Sodium	250	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-28-0	Thallium	1.0	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-62-2	Vanadium	1.0	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA
7440-66-6	Zinc	10	ND	1	50	100	11/27/18	73003	2718DNEW	17	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 73003 (1) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 73003 (1) Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A
7440-39-3	Barium	25	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A
7440-42-8	Boron	100	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A
7440-70-2	Calcium	2500	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A
7440-47-3	Chromium	25	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A
7440-50-8	Copper	25	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A
7439-89-6	Iron	150	ND	1	50	50	11/27/18	73003	SW23466B2	32	P	PEICPRAD2A
7439-95-4	Magnesium	2500	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A
7439-96-5	Manganese	20	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	11	CV	HGCV1A
7439-98-7	Molybdenum	10	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A
7440-02-0	Nickel	25	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A
7440-09-7	Potassium	2500	ND	1	50	50	11/27/18	73003	SW23466B2	32	P	PEICPRAD2A
7440-22-4	Silver	10	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A
7440-23-5	Sodium	2500	ND	1	50	50	11/27/18	73003	SW23466B2	32	P	PEICPRAD2A
7440-31-5	Tin	25	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A
7440-32-6	Titanium	25	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A
7440-62-2	Vanadium	25	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A
7440-66-6	Zinc	25	ND	1	50	50	11/27/18	73003	SW23444A2	14	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-2 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/21/18	73002	W23443A2	24	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/21/18	73002	W23443A2	24	P	PEICP2A
7440-70-2	Calcium	5000	22000	1	50	50	11/21/18	73002	W23443A2	24	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/21/18	73002	W23443A2	24	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/21/18	73002	W23443A2	24	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/21/18	73002	W23443A2	24	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/21/18	73002	W23443B2	24	P	PEICPRAD2A
7439-96-5	Manganese	40	ND	1	50	50	11/21/18	73002	W23443A2	24	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	18	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	24	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/18	73002	W23443B2	24	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	24	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	11/21/18	73002	W23443B2	24	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	24	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/21/18	73002	W23443A2	24	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-2 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022718BNEW		29	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/27/18	730022718BNEW		29	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022718BNEW		29	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/27/18	730022718BNEW		29	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/27/18	730022718BNEW		29	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/27/18	730022718BNEW		29	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022718BNEW		29	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022718BNEW		29	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-2 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/27/18	73003	W23444A2	25	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/27/18	73003	W23444A2	25	P	PEICP2A
7440-70-2	Calcium	5000	21000	1	50	50	11/27/18	73003	W23444A2	25	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/27/18	73003	W23444A2	25	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/27/18	73003	W23444A2	25	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/27/18	73003	W23466B2	43	P	PEICPRAD2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/27/18	73003	W23444A2	25	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/27/18	73003	W23444A2	25	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	18	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	25	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/27/18	73003	W23466B2	43	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	25	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	11/27/18	73003	W23466B2	43	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	25	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/27/18	73003	W23444A2	25	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-2 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032	718DNEW	29	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032	718DNEW	29	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032	718DNEW	29	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	29	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032	718DNEW	29	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/28/18	730032	718DNEW	29	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032	718DNEW	29	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	29	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-003	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-3 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	730	1	50	50	11/21/18	73002	W23443A2	25	P	PEICP2A
7440-39-3	Barium	50	65	1	50	50	11/21/18	73002	W23443A2	25	P	PEICP2A
7440-70-2	Calcium	5000	17000	1	50	50	11/21/18	73002	W23443A2	25	P	PEICP2A
7440-47-3	Chromium	50	52	1	50	50	11/21/18	73002	W23443A2	25	P	PEICP2A
7440-50-8	Copper	50	58	1	50	50	11/21/18	73002	W23443A2	25	P	PEICP2A
7439-89-6	Iron	300	1000	1	50	50	11/21/18	73002	W23443A2	25	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/21/18	73002	W23443B2	25	P	PEICPRAD2A
7439-96-5	Manganese	40	ND	1	50	50	11/21/18	73002	W23443A2	25	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	19	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	25	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/18	73002	W23443B2	25	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	25	P	PEICP2A
7440-23-5	Sodium	5000	25000	1	50	50	11/21/18	73002	W23443B2	25	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	25	P	PEICP2A
7440-66-6	Zinc	50	88	1	50	50	11/21/18	73002	W23443A2	25	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-003	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-3 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022718BNEW		30	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/27/18	730022718BNEW		30	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022718BNEW		30	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	5.0	1	50	100	11/27/18	730022718BNEW		30	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/27/18	730022718BNEW		30	MS	MS3_7700SWA
7439-92-1	Lead	3.0	12	1	50	100	11/27/18	730022718BNEW		30	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022718BNEW		30	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022718BNEW		30	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-3 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/27/18	73003	W23444A2	26	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/27/18	73003	W23444A2	26	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	11/27/18	73003	W23444A2	26	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/27/18	73003	W23444A2	26	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/27/18	73003	W23444A2	26	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/27/18	73003	W23466B2	44	P	PEICPRAD2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/27/18	73003	W23444A2	26	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/27/18	73003	W23444A2	26	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	19	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	26	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/27/18	73003	W23466B2	44	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	26	P	PEICP2A
7440-23-5	Sodium	5000	23000	1	50	50	11/27/18	73003	W23466B2	44	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	26	P	PEICP2A
7440-66-6	Zinc	50	63	1	50	50	11/27/18	73003	W23444A2	26	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-3 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032	718DNEW	30	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032	718DNEW	30	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032	718DNEW	30	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	3.8	1	50	100	11/28/18	730032	718DNEW	30	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032	718DNEW	30	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/28/18	730032	718DNEW	30	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032	718DNEW	30	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	30	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-005	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-4 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	1400	1	50	50	11/21/18	73002	W23443A2	26	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/21/18	73002	W23443A2	26	P	PEICP2A
7440-70-2	Calcium	5000	33000	1	50	50	11/21/18	73002	W23443A2	26	P	PEICP2A
7440-47-3	Chromium	50	100	1	50	50	11/21/18	73002	W23443A2	26	P	PEICP2A
7440-50-8	Copper	50	110	1	50	50	11/21/18	73002	W23443A2	26	P	PEICP2A
7439-89-6	Iron	300	1400	1	50	50	11/21/18	73002	W23443A2	26	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/21/18	73002	W23443B2	26	P	PEICPRAD2A
7439-96-5	Manganese	40	ND	1	50	50	11/21/18	73002	W23443A2	26	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	22	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	26	P	PEICP2A
7440-09-7	Potassium	5000	6300	1	50	50	11/21/18	73002	W23443B2	26	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	26	P	PEICP2A
7440-23-5	Sodium	5000	9600	1	50	50	11/21/18	73002	W23443B2	26	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	26	P	PEICP2A
7440-66-6	Zinc	50	430	1	50	50	11/21/18	73002	W23443A2	26	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-005	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-4 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022	718BNEW	31	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/27/18	730022	718BNEW	31	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022	718BNEW	31	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	98	1	50	100	11/27/18	730022	718BNEW	31	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/27/18	730022	718BNEW	31	MS	MS3_7700SWA
7439-92-1	Lead	3.0	15	1	50	100	11/27/18	730022	718BNEW	31	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022	718BNEW	31	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022	718BNEW	31	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-4 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/27/18	73003	W23444A2	27	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/27/18	73003	W23444A2	27	P	PEICP2A
7440-70-2	Calcium	5000	29000	1	50	50	11/27/18	73003	W23444A2	27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/27/18	73003	W23444A2	27	P	PEICP2A
7440-50-8	Copper	50	56	1	50	50	11/27/18	73003	W23444A2	27	P	PEICP2A
7439-89-6	Iron	300	340	1	50	50	11/27/18	73003	W23466B2	45	P	PEICPRAD2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/27/18	73003	W23444A2	27	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/27/18	73003	W23444A2	27	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	20	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	27	P	PEICP2A
7440-09-7	Potassium	5000	5100	1	50	50	11/27/18	73003	W23466B2	45	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	27	P	PEICP2A
7440-23-5	Sodium	5000	8300	1	50	50	11/27/18	73003	W23466B2	45	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	27	P	PEICP2A
7440-66-6	Zinc	50	260	1	50	50	11/27/18	73003	W23444A2	27	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-4 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032	718DNEW	31	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032	718DNEW	31	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032	718DNEW	31	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	83	1	50	100	11/28/18	730032	718DNEW	31	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032	718DNEW	31	MS	MS3_7700SWA
7439-92-1	Lead	3.0	3.1	1	50	100	11/28/18	730032	718DNEW	31	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032	718DNEW	31	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	31	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-007	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-5 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/21/18	73002	W23443A2	27	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/21/18	73002	W23443A2	27	P	PEICP2A
7440-70-2	Calcium	5000	20000	1	50	50	11/21/18	73002	W23443A2	27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/21/18	73002	W23443A2	27	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/21/18	73002	W23443A2	27	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/21/18	73002	W23443A2	27	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/21/18	73002	W23443B2	27	P	PEICPRAD2A
7439-96-5	Manganese	40	ND	1	50	50	11/21/18	73002	W23443A2	27	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	23	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	27	P	PEICP2A
7440-09-7	Potassium	5000	7800	1	50	50	11/21/18	73002	W23443B2	27	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	27	P	PEICP2A
7440-23-5	Sodium	5000	10000	1	50	50	11/21/18	73002	W23443B2	27	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	27	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/21/18	73002	W23443A2	27	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-007	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-5 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022	718BNEW	32	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/27/18	730022	718BNEW	32	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022	718BNEW	32	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/27/18	730022	718BNEW	32	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/27/18	730022	718BNEW	32	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/27/18	730022	718BNEW	32	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022	718BNEW	32	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022	718BNEW	32	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-5 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/27/18	73003	W23444A2	28	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/27/18	73003	W23444A2	28	P	PEICP2A
7440-70-2	Calcium	5000	20000	1	50	50	11/27/18	73003	W23444A2	28	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/27/18	73003	W23444A2	28	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/27/18	73003	W23444A2	28	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/27/18	73003	W23466B2	46	P	PEICPRAD2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/27/18	73003	W23444A2	28	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/27/18	73003	W23444A2	28	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	23	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	28	P	PEICP2A
7440-09-7	Potassium	5000	7700	1	50	50	11/27/18	73003	W23466B2	46	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	28	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/27/18	73003	W23466B2	46	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	28	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/27/18	73003	W23444A2	28	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-5 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032718DNEW		32	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032718DNEW		32	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032718DNEW		32	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/28/18	730032718DNEW		32	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032718DNEW		32	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/28/18	730032718DNEW		32	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032718DNEW		32	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032718DNEW		32	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-009	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-6 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/21/18	73002	W23443A2	28	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/21/18	73002	W23443A2	28	P	PEICP2A
7440-70-2	Calcium	5000	9800	1	50	50	11/21/18	73002	W23443A2	28	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/21/18	73002	W23443A2	28	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/21/18	73002	W23443A2	28	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/21/18	73002	W23443A2	28	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/21/18	73002	W23443B2	28	P	PEICPRAD2A
7439-96-5	Manganese	40	ND	1	50	50	11/21/18	73002	W23443A2	28	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	24	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	28	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/18	73002	W23443B2	28	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	28	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/21/18	73002	W23443B2	28	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	28	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/21/18	73002	W23443A2	28	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-009	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-6 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022	718BNEW	33	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/27/18	730022	718BNEW	33	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022	718BNEW	33	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/27/18	730022	718BNEW	33	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/27/18	730022	718BNEW	33	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/27/18	730022	718BNEW	33	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022	718BNEW	33	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022	718BNEW	33	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-010	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-6 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/27/18	73003	W23444A2	29	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/27/18	73003	W23444A2	29	P	PEICP2A
7440-70-2	Calcium	5000	9500	1	50	50	11/27/18	73003	W23444A2	29	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/27/18	73003	W23444A2	29	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/27/18	73003	W23444A2	29	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/27/18	73003	W23466B2	47	P	PEICPRAD2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/27/18	73003	W23444A2	29	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/27/18	73003	W23444A2	29	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	24	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	29	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/27/18	73003	W23466B2	47	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	29	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/27/18	73003	W23466B2	47	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	29	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/27/18	73003	W23444A2	29	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-010	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-6 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032	718DNEW	33	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032	718DNEW	33	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032	718DNEW	33	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	33	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032	718DNEW	33	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/28/18	730032	718DNEW	33	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032	718DNEW	33	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	33	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-011	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-7 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	390	1	50	50	11/21/18	73002	W23443A2	29	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/21/18	73002	W23443A2	29	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	11/21/18	73002	W23443A2	29	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/21/18	73002	W23443A2	29	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/21/18	73002	W23443A2	29	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/21/18	73002	W23443A2	29	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/21/18	73002	W23443B2	29	P	PEICPRAD2A
7439-96-5	Manganese	40	ND	1	50	50	11/21/18	73002	W23443A2	29	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	25	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	29	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/18	73002	W23443B2	29	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	29	P	PEICP2A
7440-23-5	Sodium	5000	18000	1	50	50	11/21/18	73002	W23443B2	29	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	29	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/21/18	73002	W23443A2	29	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-011	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-7 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022	718BNEW	34	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/27/18	730022	718BNEW	34	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022	718BNEW	34	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	2.2	1	50	100	11/27/18	730022	718BNEW	34	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/27/18	730022	718BNEW	34	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/27/18	730022	718BNEW	34	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022	718BNEW	34	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022	718BNEW	34	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-012	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-7 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/27/18	73003	W23444A2	30	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/27/18	73003	W23444A2	30	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/27/18	73003	W23444A2	30	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/27/18	73003	W23444A2	30	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/27/18	73003	W23444A2	30	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/27/18	73003	W23466B2	48	P	PEICPRAD2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/27/18	73003	W23444A2	30	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/27/18	73003	W23444A2	30	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	25	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	30	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/27/18	73003	W23466B2	48	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	30	P	PEICP2A
7440-23-5	Sodium	5000	16000	1	50	50	11/27/18	73003	W23466B2	48	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	30	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/27/18	73003	W23444A2	30	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-012	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-7 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032	718DNEW	34	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032	718DNEW	34	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032	718DNEW	34	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	34	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032	718DNEW	34	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/28/18	730032	718DNEW	34	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032	718DNEW	34	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	34	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-013	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-10 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/21/18	73002	W23443A2	30	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/21/18	73002	W23443A2	30	P	PEICP2A
7440-70-2	Calcium	5000	29000	1	50	50	11/21/18	73002	W23443A2	30	P	PEICP2A
7440-47-3	Chromium	50	120	1	50	50	11/21/18	73002	W23443A2	30	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/21/18	73002	W23443A2	30	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/21/18	73002	W23443A2	30	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/21/18	73002	W23443B2	30	P	PEICPRAD2A
7439-96-5	Manganese	40	ND	1	50	50	11/21/18	73002	W23443A2	30	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	26	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	30	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/18	73002	W23443B2	30	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	30	P	PEICP2A
7440-23-5	Sodium	5000	13000	1	50	50	11/21/18	73002	W23443B2	30	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	30	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/21/18	73002	W23443A2	30	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-013	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-10 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022	718BNEW	35	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/27/18	730022	718BNEW	35	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022	718BNEW	35	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	57	1	50	100	11/27/18	730022	718BNEW	35	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/27/18	730022	718BNEW	35	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/27/18	730022	718BNEW	35	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022	718BNEW	35	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022	718BNEW	35	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-014	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-10 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/27/18	73003	W23444A2	31	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/27/18	73003	W23444A2	31	P	PEICP2A
7440-70-2	Calcium	5000	27000	1	50	50	11/27/18	73003	W23444A2	31	P	PEICP2A
7440-47-3	Chromium	50	110	1	50	50	11/27/18	73003	W23444A2	31	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/27/18	73003	W23444A2	31	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/27/18	73003	W23466B2	49	P	PEICPRAD2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/27/18	73003	W23444A2	31	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/27/18	73003	W23444A2	31	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	26	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	31	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/27/18	73003	W23466B2	49	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	31	P	PEICP2A
7440-23-5	Sodium	5000	12000	1	50	50	11/27/18	73003	W23466B2	49	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	31	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/27/18	73003	W23444A2	31	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-014	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-10 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032	718DNEW	35	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032	718DNEW	35	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032	718DNEW	35	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	60	1	50	100	11/28/18	730032	718DNEW	35	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032	718DNEW	35	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/28/18	730032	718DNEW	35	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032	718DNEW	35	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	35	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-015	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-12 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	100	100	11/21/18	73002	W23443A2	16	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	11/21/18	73002	W23443A2	16	P	PEICP2A
7440-70-2	Calcium	5000	45000	1	100	100	11/21/18	73002	W23443A2	16	P	PEICP2A
7440-47-3	Chromium	50	ND	1	100	100	11/21/18	73002	W23443A2	16	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	11/21/18	73002	W23443A2	16	P	PEICP2A
7439-89-6	Iron	300	430	1	100	100	11/21/18	73002	W23443A2	16	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	100	100	11/21/18	73002	W23443B2	16	P	PEICPRAD2A
7439-96-5	Manganese	40	82	1	100	100	11/21/18	73002	W23443A2	16	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	14	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	100	100	11/21/18	73002	W23443A2	16	P	PEICP2A
7440-09-7	Potassium	5000	5300	1	100	100	11/21/18	73002	W23443B2	16	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	100	100	11/21/18	73002	W23443A2	16	P	PEICP2A
7440-23-5	Sodium	5000	27000	1	100	100	11/21/18	73002	W23443B2	16	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	100	100	11/21/18	73002	W23443A2	16	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	11/21/18	73002	W23443A2	16	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-015	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-12 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	100	200	11/27/18	730022	718BNEW	20	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	11/27/18	730022	718BNEW	20	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	11/27/18	730022	718BNEW	20	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	11/27/18	730022	718BNEW	20	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	11/27/18	730022	718BNEW	20	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	100	200	11/27/18	730022	718BNEW	20	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	100	200	11/27/18	730022	718BNEW	20	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	100	200	11/27/18	730022	718BNEW	20	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-016	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-12 U MS	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	5500	1	50	50	11/21/18	73002	W23443A2	18	P	PEICP2A
7440-39-3	Barium	50	560	1	50	50	11/21/18	73002	W23443A2	18	P	PEICP2A
7440-70-2	Calcium	5000	97000	1	50	50	11/21/18	73002	W23443A2	18	P	PEICP2A
7440-47-3	Chromium	50	540	1	50	50	11/21/18	73002	W23443A2	18	P	PEICP2A
7440-50-8	Copper	50	550	1	50	50	11/21/18	73002	W23443A2	18	P	PEICP2A
7439-89-6	Iron	300	5800	1	50	50	11/21/18	73002	W23443A2	18	P	PEICP2A
7439-95-4	Magnesium	5000	57000	1	50	50	11/21/18	73002	W23443B2	18	P	PEICPRAD2A
7439-96-5	Manganese	40	630	1	50	50	11/21/18	73002	W23443A2	18	P	PEICP2A
7439-97-6	Mercury	0.50	10	1	25	25	11/29/18	73002	H23443SW	16	CV	HGCV3A
7440-02-0	Nickel	50	540	1	50	50	11/21/18	73002	W23443A2	18	P	PEICP2A
7440-09-7	Potassium	5000	58000	1	50	50	11/21/18	73002	W23443B2	18	P	PEICPRAD2A
7440-22-4	Silver	20	110	1	50	50	11/21/18	73002	W23443A2	18	P	PEICP2A
7440-23-5	Sodium	5000	79000	1	50	50	11/21/18	73002	W23443B2	18	P	PEICPRAD2A
7440-62-2	Vanadium	50	540	1	50	50	11/21/18	73002	W23443A2	18	P	PEICP2A
7440-66-6	Zinc	50	550	1	50	50	11/21/18	73002	W23443A2	18	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-016	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-12 U MS	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	490	1	50	100	11/27/18	730022	718BNEW	23	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	500	1	50	100	11/27/18	730022	718BNEW	23	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	440	1	50	100	11/27/18	730022	718BNEW	23	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	500	1	50	100	11/27/18	730022	718BNEW	23	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	490	1	50	100	11/27/18	730022	718BNEW	23	MS	MS3_7700SWA
7439-92-1	Lead	3.0	490	1	50	100	11/27/18	730022	718BNEW	23	MS	MS3_7700SWA
7782-49-2	Selenium	10	480	1	50	100	11/27/18	730022	718BNEW	23	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	500	1	50	100	11/27/18	730022	718BNEW	23	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-017	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-12 U MSD	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	5400	1	50	50	11/21/18	73002	W23443A2	19	P	PEICP2A
7440-39-3	Barium	50	550	1	50	50	11/21/18	73002	W23443A2	19	P	PEICP2A
7440-70-2	Calcium	5000	96000	1	50	50	11/21/18	73002	W23443A2	19	P	PEICP2A
7440-47-3	Chromium	50	530	1	50	50	11/21/18	73002	W23443A2	19	P	PEICP2A
7440-50-8	Copper	50	540	1	50	50	11/21/18	73002	W23443A2	19	P	PEICP2A
7439-89-6	Iron	300	5800	1	50	50	11/21/18	73002	W23443A2	19	P	PEICP2A
7439-95-4	Magnesium	5000	56000	1	50	50	11/21/18	73002	W23443B2	19	P	PEICPRAD2A
7439-96-5	Manganese	40	610	1	50	50	11/21/18	73002	W23443A2	19	P	PEICP2A
7439-97-6	Mercury	0.50	11	1	25	25	11/29/18	73002	H23443SW	17	CV	HGCV3A
7440-02-0	Nickel	50	530	1	50	50	11/21/18	73002	W23443A2	19	P	PEICP2A
7440-09-7	Potassium	5000	58000	1	50	50	11/21/18	73002	W23443B2	19	P	PEICPRAD2A
7440-22-4	Silver	20	110	1	50	50	11/21/18	73002	W23443A2	19	P	PEICP2A
7440-23-5	Sodium	5000	79000	1	50	50	11/21/18	73002	W23443B2	19	P	PEICPRAD2A
7440-62-2	Vanadium	50	530	1	50	50	11/21/18	73002	W23443A2	19	P	PEICP2A
7440-66-6	Zinc	50	530	1	50	50	11/21/18	73002	W23443A2	19	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-017	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-12 U MSD	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	530	1	50	100	11/27/18	730022	718BNEW	24	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	540	1	50	100	11/27/18	730022	718BNEW	24	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	480	1	50	100	11/27/18	730022	718BNEW	24	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	540	1	50	100	11/27/18	730022	718BNEW	24	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	540	1	50	100	11/27/18	730022	718BNEW	24	MS	MS3_7700SWA
7439-92-1	Lead	3.0	540	1	50	100	11/27/18	730022	718BNEW	24	MS	MS3_7700SWA
7782-49-2	Selenium	10	510	1	50	100	11/27/18	730022	718BNEW	24	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	540	1	50	100	11/27/18	730022	718BNEW	24	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-018	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-12 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	100	100	11/27/18	73003	W23444A2	17	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	11/27/18	73003	W23444A2	17	P	PEICP2A
7440-70-2	Calcium	5000	46000	1	100	100	11/27/18	73003	W23444A2	17	P	PEICP2A
7440-47-3	Chromium	50	ND	1	100	100	11/27/18	73003	W23444A2	17	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	11/27/18	73003	W23444A2	17	P	PEICP2A
7439-89-6	Iron	300	310	1	100	100	11/27/18	73003	W23466B2	35	P	PEICPRAD2A
7439-95-4	Magnesium	5000	ND	1	100	100	11/27/18	73003	W23444A2	17	P	PEICP2A
7439-96-5	Manganese	40	82	1	100	100	11/27/18	73003	W23444A2	17	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	14	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	100	100	11/27/18	73003	W23444A2	17	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	100	100	11/27/18	73003	W23466B2	35	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	100	100	11/27/18	73003	W23444A2	17	P	PEICP2A
7440-23-5	Sodium	5000	28000	1	100	100	11/27/18	73003	W23466B2	35	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	100	100	11/27/18	73003	W23444A2	17	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	11/27/18	73003	W23444A2	17	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-018	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-12 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	100	200	11/27/18	730032	718DNEW	20	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	11/27/18	730032	718DNEW	20	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	11/27/18	730032	718DNEW	20	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	11/27/18	730032	718DNEW	20	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	11/27/18	730032	718DNEW	20	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	100	200	11/27/18	730032	718DNEW	20	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	100	200	11/27/18	730032	718DNEW	20	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	100	200	11/27/18	730032	718DNEW	20	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-019	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-12 F MS	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	5400	1	50	50	11/27/18	73003	W23444A2	19	P	PEICP2A
7440-39-3	Barium	50	560	1	50	50	11/27/18	73003	W23444A2	19	P	PEICP2A
7440-70-2	Calcium	5000	95000	1	50	50	11/27/18	73003	W23444A2	19	P	PEICP2A
7440-47-3	Chromium	50	540	1	50	50	11/27/18	73003	W23444A2	19	P	PEICP2A
7440-50-8	Copper	50	550	1	50	50	11/27/18	73003	W23444A2	19	P	PEICP2A
7439-89-6	Iron	300	5700	1	50	50	11/27/18	73003	W23466B2	37	P	PEICPRAD2A
7439-95-4	Magnesium	5000	57000	1	50	50	11/27/18	73003	W23444A2	19	P	PEICP2A
7439-96-5	Manganese	40	600	1	50	50	11/27/18	73003	W23444A2	19	P	PEICP2A
7439-97-6	Mercury	0.50	10	1	25	25	11/29/18	73003	H23444SW	16	CV	HGCV1A
7440-02-0	Nickel	50	550	1	50	50	11/27/18	73003	W23444A2	19	P	PEICP2A
7440-09-7	Potassium	5000	57000	1	50	50	11/27/18	73003	W23466B2	37	P	PEICPRAD2A
7440-22-4	Silver	20	110	1	50	50	11/27/18	73003	W23444A2	19	P	PEICP2A
7440-23-5	Sodium	5000	77000	1	50	50	11/27/18	73003	W23466B2	37	P	PEICPRAD2A
7440-62-2	Vanadium	50	540	1	50	50	11/27/18	73003	W23444A2	19	P	PEICP2A
7440-66-6	Zinc	50	550	1	50	50	11/27/18	73003	W23444A2	19	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-019	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-12 F MS	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	540	1	50	100	11/27/18	730032	718DNEW	23	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	550	1	50	100	11/27/18	730032	718DNEW	23	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	490	1	50	100	11/27/18	730032	718DNEW	23	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	550	1	50	100	11/27/18	730032	718DNEW	23	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	560	1	50	100	11/27/18	730032	718DNEW	23	MS	MS3_7700SWA
7439-92-1	Lead	3.0	540	1	50	100	11/27/18	730032	718DNEW	23	MS	MS3_7700SWA
7782-49-2	Selenium	10	520	1	50	100	11/27/18	730032	718DNEW	23	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	550	1	50	100	11/27/18	730032	718DNEW	23	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-020	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-12 F MSD	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	5300	1	50	50	11/27/18	73003	W23444A2	20	P	PEICP2A
7440-39-3	Barium	50	540	1	50	50	11/27/18	73003	W23444A2	20	P	PEICP2A
7440-70-2	Calcium	5000	94000	1	50	50	11/27/18	73003	W23444A2	20	P	PEICP2A
7440-47-3	Chromium	50	520	1	50	50	11/27/18	73003	W23444A2	20	P	PEICP2A
7440-50-8	Copper	50	530	1	50	50	11/27/18	73003	W23444A2	20	P	PEICP2A
7439-89-6	Iron	300	5800	1	50	50	11/27/18	73003	W23466B2	38	P	PEICPRAD2A
7439-95-4	Magnesium	5000	56000	1	50	50	11/27/18	73003	W23444A2	20	P	PEICP2A
7439-96-5	Manganese	40	600	1	50	50	11/27/18	73003	W23444A2	20	P	PEICP2A
7439-97-6	Mercury	0.50	10	1	25	25	11/29/18	73003	H23444SW	17	CV	HGCV1A
7440-02-0	Nickel	50	530	1	50	50	11/27/18	73003	W23444A2	20	P	PEICP2A
7440-09-7	Potassium	5000	58000	1	50	50	11/27/18	73003	W23466B2	38	P	PEICPRAD2A
7440-22-4	Silver	20	100	1	50	50	11/27/18	73003	W23444A2	20	P	PEICP2A
7440-23-5	Sodium	5000	78000	1	50	50	11/27/18	73003	W23466B2	38	P	PEICPRAD2A
7440-62-2	Vanadium	50	520	1	50	50	11/27/18	73003	W23444A2	20	P	PEICP2A
7440-66-6	Zinc	50	530	1	50	50	11/27/18	73003	W23444A2	20	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-020	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-12 F MSD	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	520	1	50	100	11/27/18	730032	718DNEW	24	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	530	1	50	100	11/27/18	730032	718DNEW	24	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	470	1	50	100	11/27/18	730032	718DNEW	24	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	520	1	50	100	11/27/18	730032	718DNEW	24	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	540	1	50	100	11/27/18	730032	718DNEW	24	MS	MS3_7700SWA
7439-92-1	Lead	3.0	510	1	50	100	11/27/18	730032	718DNEW	24	MS	MS3_7700SWA
7782-49-2	Selenium	10	490	1	50	100	11/27/18	730032	718DNEW	24	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	520	1	50	100	11/27/18	730032	718DNEW	24	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-021	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-14 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	1400	1	50	50	11/21/18	73002	W23443A2	31	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/21/18	73002	W23443A2	31	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	11/21/18	73002	W23443A2	31	P	PEICP2A
7440-47-3	Chromium	50	120	1	50	50	11/21/18	73002	W23443A2	31	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/21/18	73002	W23443A2	31	P	PEICP2A
7439-89-6	Iron	300	1600	1	50	50	11/21/18	73002	W23443A2	31	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/21/18	73002	W23443B2	31	P	PEICPRAD2A
7439-96-5	Manganese	40	58	1	50	50	11/21/18	73002	W23443A2	31	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	27	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	31	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/18	73002	W23443B2	31	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	31	P	PEICP2A
7440-23-5	Sodium	5000	13000	1	50	50	11/21/18	73002	W23443B2	31	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	31	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/21/18	73002	W23443A2	31	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-021	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-14 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022718BNEW		36	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/27/18	730022718BNEW		36	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022718BNEW		36	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	9.1	1	50	100	11/27/18	730022718BNEW		36	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/27/18	730022718BNEW		36	MS	MS3_7700SWA
7439-92-1	Lead	3.0	11	1	50	100	11/27/18	730022718BNEW		36	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022718BNEW		36	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022718BNEW		36	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-022	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-14 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/27/18	73003	W23444A2	34	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/27/18	73003	W23444A2	34	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/27/18	73003	W23444A2	34	P	PEICP2A
7440-47-3	Chromium	50	63	1	50	50	11/27/18	73003	W23444A2	34	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/27/18	73003	W23444A2	34	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/27/18	73003	W23466B2	52	P	PEICPRAD2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/27/18	73003	W23444A2	34	P	PEICP2A
7439-96-5	Manganese	40	52	1	50	50	11/27/18	73003	W23444A2	34	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	27	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	34	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/27/18	73003	W23466B2	52	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	34	P	PEICP2A
7440-23-5	Sodium	5000	12000	1	50	50	11/27/18	73003	W23466B2	52	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	34	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/27/18	73003	W23444A2	34	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-022	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-14 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032	718DNEW	36	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032	718DNEW	36	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032	718DNEW	36	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	8.6	1	50	100	11/28/18	730032	718DNEW	36	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032	718DNEW	36	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/28/18	730032	718DNEW	36	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032	718DNEW	36	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	36	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-023	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-64 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	2600	1	50	50	11/21/18	73002	W23443A2	34	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/21/18	73002	W23443A2	34	P	PEICP2A
7440-70-2	Calcium	5000	10000	1	50	50	11/21/18	73002	W23443A2	34	P	PEICP2A
7440-47-3	Chromium	50	160	1	50	50	11/21/18	73002	W23443A2	34	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/21/18	73002	W23443A2	34	P	PEICP2A
7439-89-6	Iron	300	2700	1	50	50	11/21/18	73002	W23443A2	34	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/21/18	73002	W23443B2	34	P	PEICPRAD2A
7439-96-5	Manganese	40	45	1	50	50	11/21/18	73002	W23443A2	34	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	28	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	34	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/18	73002	W23443B2	34	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	34	P	PEICP2A
7440-23-5	Sodium	5000	13000	1	50	50	11/21/18	73002	W23443B2	34	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	34	P	PEICP2A
7440-66-6	Zinc	50	68	1	50	50	11/21/18	73002	W23443A2	34	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-023	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-64 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022718BNEW		37	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/27/18	730022718BNEW		37	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022718BNEW		37	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	8.8	1	50	100	11/27/18	730022718BNEW		37	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/27/18	730022718BNEW		37	MS	MS3_7700SWA
7439-92-1	Lead	3.0	21	1	50	100	11/27/18	730022718BNEW		37	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022718BNEW		37	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022718BNEW		37	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-024	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-64 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/27/18	73003	W23444A2	35	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/27/18	73003	W23444A2	35	P	PEICP2A
7440-70-2	Calcium	5000	9900	1	50	50	11/27/18	73003	W23444A2	35	P	PEICP2A
7440-47-3	Chromium	50	56	1	50	50	11/27/18	73003	W23444A2	35	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/27/18	73003	W23444A2	35	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/27/18	73003	W23466B2	53	P	PEICPRAD2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/27/18	73003	W23444A2	35	P	PEICP2A
7439-96-5	Manganese	40	44	1	50	50	11/27/18	73003	W23444A2	35	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	28	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	35	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/27/18	73003	W23466B2	53	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	35	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/27/18	73003	W23466B2	53	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	35	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/27/18	73003	W23444A2	35	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-024	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-64 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032	718DNEW	37	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032	718DNEW	37	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032	718DNEW	37	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	7.9	1	50	100	11/28/18	730032	718DNEW	37	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032	718DNEW	37	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/28/18	730032	718DNEW	37	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032	718DNEW	37	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	37	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-025	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-16 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	2900	1	50	50	11/21/18	73002	W23443A2	35	P	PEICP2A
7440-39-3	Barium	50	170	1	50	50	11/21/18	73002	W23443A2	35	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/21/18	73002	W23443A2	35	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/21/18	73002	W23443A2	35	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/21/18	73002	W23443A2	35	P	PEICP2A
7439-89-6	Iron	300	4000	1	50	50	11/21/18	73002	W23443A2	35	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/21/18	73002	W23443B2	35	P	PEICPRAD2A
7439-96-5	Manganese	40	1200	1	50	50	11/21/18	73002	W23443A2	35	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	29	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	35	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/18	73002	W23443B2	35	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	35	P	PEICP2A
7440-23-5	Sodium	5000	12000	1	50	50	11/21/18	73002	W23443B2	35	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	35	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/21/18	73002	W23443A2	35	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-025	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-16 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022	718BNEW	41	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/27/18	730022	718BNEW	41	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	1.0	1	50	100	11/27/18	730022	718BNEW	41	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	5.5	1	50	100	11/27/18	730022	718BNEW	41	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	2.2	1	50	100	11/27/18	730022	718BNEW	41	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/27/18	730022	718BNEW	41	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022	718BNEW	41	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022	718BNEW	41	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-026	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-16 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	400	1	50	50	11/27/18	73003	W23444A2	36	P	PEICP2A
7440-39-3	Barium	50	160	1	50	50	11/27/18	73003	W23444A2	36	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	11/27/18	73003	W23444A2	36	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/27/18	73003	W23444A2	36	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/27/18	73003	W23444A2	36	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/27/18	73003	W23466B2	54	P	PEICPRAD2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/27/18	73003	W23444A2	36	P	PEICP2A
7439-96-5	Manganese	40	1100	1	50	50	11/27/18	73003	W23444A2	36	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	29	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	36	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/27/18	73003	W23466B2	54	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	36	P	PEICP2A
7440-23-5	Sodium	5000	12000	1	50	50	11/27/18	73003	W23466B2	54	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	36	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/27/18	73003	W23444A2	36	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-026	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-16 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032	718DNEW	41	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032	718DNEW	41	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032	718DNEW	41	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	5.7	1	50	100	11/28/18	730032	718DNEW	41	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032	718DNEW	41	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/28/18	730032	718DNEW	41	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032	718DNEW	41	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	41	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-027	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-17 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	5700	1	50	50	11/21/18	73002	W23443A2	36	P	PEICP2A
7440-39-3	Barium	50	75	1	50	50	11/21/18	73002	W23443A2	36	P	PEICP2A
7440-70-2	Calcium	5000	31000	1	50	50	11/21/18	73002	W23443A2	36	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/21/18	73002	W23443A2	36	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/21/18	73002	W23443A2	36	P	PEICP2A
7439-89-6	Iron	300	7700	1	50	50	11/21/18	73002	W23443A2	36	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/21/18	73002	W23443B2	36	P	PEICPRAD2A
7439-96-5	Manganese	40	930	1	50	50	11/21/18	73002	W23443A2	36	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	30	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	36	P	PEICP2A
7440-09-7	Potassium	5000	6500	1	50	50	11/21/18	73002	W23443B2	36	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	36	P	PEICP2A
7440-23-5	Sodium	5000	23000	1	50	50	11/21/18	73002	W23443B2	36	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	36	P	PEICP2A
7440-66-6	Zinc	50	600	1	50	50	11/21/18	73002	W23443A2	36	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-027	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-17 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022718BNEW		42	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	2.9	1	50	100	11/27/18	730022718BNEW		42	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022718BNEW		42	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	25	1	50	100	11/27/18	730022718BNEW		42	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	2.8	1	50	100	11/27/18	730022718BNEW		42	MS	MS3_7700SWA
7439-92-1	Lead	3.0	49	1	50	100	11/27/18	730022718BNEW		42	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022718BNEW		42	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022718BNEW		42	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-028	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-17 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/27/18	73003	W23444A2	37	P	PEICP2A
7440-39-3	Barium	50	53	1	50	50	11/27/18	73003	W23444A2	37	P	PEICP2A
7440-70-2	Calcium	5000	32000	1	50	50	11/27/18	73003	W23444A2	37	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/27/18	73003	W23444A2	37	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/27/18	73003	W23444A2	37	P	PEICP2A
7439-89-6	Iron	300	1800	1	50	50	11/27/18	73003	W23466B2	55	P	PEICPRAD2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/27/18	73003	W23444A2	37	P	PEICP2A
7439-96-5	Manganese	40	940	1	50	50	11/27/18	73003	W23444A2	37	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	30	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	37	P	PEICP2A
7440-09-7	Potassium	5000	6400	1	50	50	11/27/18	73003	W23466B2	55	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	37	P	PEICP2A
7440-23-5	Sodium	5000	24000	1	50	50	11/27/18	73003	W23466B2	55	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	37	P	PEICP2A
7440-66-6	Zinc	50	260	1	50	50	11/27/18	73003	W23444A2	37	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-028	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-17 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032	718DNEW	42	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032	718DNEW	42	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032	718DNEW	42	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	3.6	1	50	100	11/28/18	730032	718DNEW	42	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032	718DNEW	42	MS	MS3_7700SWA
7439-92-1	Lead	3.0	3.2	1	50	100	11/28/18	730032	718DNEW	42	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032	718DNEW	42	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	42	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-029	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-18 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/21/18	73002	W23443A2	37	P	PEICP2A
7440-39-3	Barium	50	100	1	50	50	11/21/18	73002	W23443A2	37	P	PEICP2A
7440-70-2	Calcium	5000	21000	1	50	50	11/21/18	73002	W23443A2	37	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/21/18	73002	W23443A2	37	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/21/18	73002	W23443A2	37	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/21/18	73002	W23443A2	37	P	PEICP2A
7439-95-4	Magnesium	5000	5600	1	50	50	11/21/18	73002	W23443B2	37	P	PEICPRAD2A
7439-96-5	Manganese	40	1200	1	50	50	11/21/18	73002	W23443A2	37	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	33	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	37	P	PEICP2A
7440-09-7	Potassium	5000	6300	1	50	50	11/21/18	73002	W23443B2	37	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	37	P	PEICP2A
7440-23-5	Sodium	5000	26000	1	50	50	11/21/18	73002	W23443B2	37	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	37	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/21/18	73002	W23443A2	37	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-029	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-18 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022718BNEW		43	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/27/18	730022718BNEW		43	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022718BNEW		43	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/27/18	730022718BNEW		43	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/27/18	730022718BNEW		43	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/27/18	730022718BNEW		43	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022718BNEW		43	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022718BNEW		43	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-030	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-18 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/27/18	73003	W23444A2	38	P	PEICP2A
7440-39-3	Barium	50	92	1	50	50	11/27/18	73003	W23444A2	38	P	PEICP2A
7440-70-2	Calcium	5000	20000	1	50	50	11/27/18	73003	W23444A2	38	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/27/18	73003	W23444A2	38	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/27/18	73003	W23444A2	38	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/27/18	73003	W23466B2	56	P	PEICPRAD2A
7439-95-4	Magnesium	5000	5500	1	50	50	11/27/18	73003	W23444A2	38	P	PEICP2A
7439-96-5	Manganese	40	940	1	50	50	11/27/18	73003	W23444A2	38	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	31	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	38	P	PEICP2A
7440-09-7	Potassium	5000	5800	1	50	50	11/27/18	73003	W23466B2	56	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	38	P	PEICP2A
7440-23-5	Sodium	5000	24000	1	50	50	11/27/18	73003	W23466B2	56	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	38	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/27/18	73003	W23444A2	38	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-030	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-18 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032	718DNEW	43	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032	718DNEW	43	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032	718DNEW	43	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	43	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032	718DNEW	43	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/28/18	730032	718DNEW	43	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032	718DNEW	43	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	43	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-031	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-19 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/21/18	73002	W23443A2	38	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/21/18	73002	W23443A2	38	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/21/18	73002	W23443A2	38	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/21/18	73002	W23443A2	38	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/21/18	73002	W23443A2	38	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/21/18	73002	W23443A2	38	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/21/18	73002	W23443B2	38	P	PEICPRAD2A
7439-96-5	Manganese	40	ND	1	50	50	11/21/18	73002	W23443A2	38	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	34	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	38	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/18	73002	W23443B2	38	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	38	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	11/21/18	73002	W23443B2	38	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	38	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/21/18	73002	W23443A2	38	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-031	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-19 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022718BNEW		44	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/27/18	730022718BNEW		44	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022718BNEW		44	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/27/18	730022718BNEW		44	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/27/18	730022718BNEW		44	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/27/18	730022718BNEW		44	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022718BNEW		44	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022718BNEW		44	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-032	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-19 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/27/18	73003	W23444A2	39	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/27/18	73003	W23444A2	39	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/27/18	73003	W23444A2	39	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/27/18	73003	W23444A2	39	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/27/18	73003	W23444A2	39	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/27/18	73003	W23466B2	57	P	PEICPRAD2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/27/18	73003	W23444A2	39	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/27/18	73003	W23444A2	39	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	32	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	39	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/27/18	73003	W23466B2	57	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	39	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	11/27/18	73003	W23466B2	57	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	39	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/27/18	73003	W23444A2	39	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-032	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-19 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032	718DNEW	44	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032	718DNEW	44	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032	718DNEW	44	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	44	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032	718DNEW	44	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/28/18	730032	718DNEW	44	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032	718DNEW	44	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	44	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-033	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-20 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	19000	1	50	50	11/21/18	73002	W23443A2	39	P	PEICP2A
7440-39-3	Barium	50	150	1	50	50	11/21/18	73002	W23443A2	39	P	PEICP2A
7440-70-2	Calcium	5000	21000	1	50	50	11/21/18	73002	W23443A2	39	P	PEICP2A
7440-47-3	Chromium	50	72	1	50	50	11/21/18	73002	W23443A2	39	P	PEICP2A
7440-50-8	Copper	50	63	1	50	50	11/21/18	73002	W23443A2	39	P	PEICP2A
7439-89-6	Iron	300	34000	1	50	50	11/21/18	73002	W23443A2	39	P	PEICP2A
7439-95-4	Magnesium	5000	10000	1	50	50	11/21/18	73002	W23443B2	39	P	PEICPRAD2A
7439-96-5	Manganese	40	1100	1	50	50	11/21/18	73002	W23443A2	39	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	35	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	39	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/18	73002	W23443B2	39	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	39	P	PEICP2A
7440-23-5	Sodium	5000	19000	1	50	50	11/21/18	73002	W23443B2	39	P	PEICPRAD2A
7440-62-2	Vanadium	50	57	1	50	50	11/21/18	73002	W23443A2	39	P	PEICP2A
7440-66-6	Zinc	50	340	1	50	50	11/21/18	73002	W23443A2	39	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-033	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-20 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022	718BNEW	45	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	11	1	50	100	11/27/18	730022	718BNEW	45	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022	718BNEW	45	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/27/18	730022	718BNEW	45	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	10	1	50	100	11/27/18	730022	718BNEW	45	MS	MS3_7700SWA
7439-92-1	Lead	3.0	27	1	50	100	11/27/18	730022	718BNEW	45	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022	718BNEW	45	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022	718BNEW	45	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-034	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-20 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	560	1	50	50	11/27/18	73003	W23444A2	40	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/27/18	73003	W23444A2	40	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	11/27/18	73003	W23444A2	40	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/27/18	73003	W23444A2	40	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/27/18	73003	W23444A2	40	P	PEICP2A
7439-89-6	Iron	300	570	1	50	50	11/27/18	73003	W23466B2	58	P	PEICPRAD2A
7439-95-4	Magnesium	5000	6900	1	50	50	11/27/18	73003	W23444A2	40	P	PEICP2A
7439-96-5	Manganese	40	62	1	50	50	11/27/18	73003	W23444A2	40	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	35	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	40	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/27/18	73003	W23466B2	58	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	40	P	PEICP2A
7440-23-5	Sodium	5000	18000	1	50	50	11/27/18	73003	W23466B2	58	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	40	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/27/18	73003	W23444A2	40	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-034	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-20 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032	718DNEW	45	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032	718DNEW	45	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032	718DNEW	45	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	45	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032	718DNEW	45	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/28/18	730032	718DNEW	45	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032	718DNEW	45	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	45	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-035	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-21 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	2500	1	50	50	11/21/18	73002	W23443A2	40	P	PEICP2A
7440-39-3	Barium	50	92	1	50	50	11/21/18	73002	W23443A2	40	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	11/21/18	73002	W23443A2	40	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/21/18	73002	W23443A2	40	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/21/18	73002	W23443A2	40	P	PEICP2A
7439-89-6	Iron	300	3900	1	50	50	11/21/18	73002	W23443A2	40	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/21/18	73002	W23443B2	40	P	PEICPRAD2A
7439-96-5	Manganese	40	320	1	50	50	11/21/18	73002	W23443A2	40	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	36	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	40	P	PEICP2A
7440-09-7	Potassium	5000	6700	1	50	50	11/21/18	73002	W23443B2	40	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	40	P	PEICP2A
7440-23-5	Sodium	5000	23000	1	50	50	11/21/18	73002	W23443B2	40	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	40	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/21/18	73002	W23443A2	40	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-035	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-21 U	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022718BNEW		46	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/27/18	730022718BNEW		46	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022718BNEW		46	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/27/18	730022718BNEW		46	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/27/18	730022718BNEW		46	MS	MS3_7700SWA
7439-92-1	Lead	3.0	7.0	1	50	100	11/27/18	730022718BNEW		46	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022718BNEW		46	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022718BNEW		46	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-036	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-21 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/27/18	73003	W23444A2	41	P	PEICP2A
7440-39-3	Barium	50	84	1	50	50	11/27/18	73003	W23444A2	41	P	PEICP2A
7440-70-2	Calcium	5000	18000	1	50	50	11/27/18	73003	W23444A2	41	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/27/18	73003	W23444A2	41	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/27/18	73003	W23444A2	41	P	PEICP2A
7439-89-6	Iron	300	580	1	50	50	11/27/18	73003	W23466B2	59	P	PEICPRAD2A
7439-95-4	Magnesium	5000	5000	1	50	50	11/27/18	73003	W23444A2	41	P	PEICP2A
7439-96-5	Manganese	40	130	1	50	50	11/27/18	73003	W23444A2	41	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73003	H23444SW	36	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/27/18	73003	W23444A2	41	P	PEICP2A
7440-09-7	Potassium	5000	7100	1	50	50	11/27/18	73003	W23466B2	59	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/27/18	73003	W23444A2	41	P	PEICP2A
7440-23-5	Sodium	5000	25000	1	50	50	11/27/18	73003	W23466B2	59	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/27/18	73003	W23444A2	41	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/27/18	73003	W23444A2	41	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-036	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	LMW-21 F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/28/18	730032	718DNEW	46	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/28/18	730032	718DNEW	46	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/28/18	730032	718DNEW	46	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	46	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/28/18	730032	718DNEW	46	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/28/18	730032	718DNEW	46	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/28/18	730032	718DNEW	46	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/28/18	730032	718DNEW	46	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-037	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	FB-20181112	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	11/21/18	73002	W23443A2	41	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/21/18	73002	W23443A2	41	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	11/21/18	73002	W23443A2	41	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/21/18	73002	W23443A2	41	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/21/18	73002	W23443A2	41	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/21/18	73002	W23443A2	41	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/21/18	73002	W23443B2	41	P	PEICPRAD2A
7439-96-5	Manganese	40	ND	1	50	50	11/21/18	73002	W23443A2	41	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	11/29/18	73002	H23443SW	37	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	11/21/18	73002	W23443A2	41	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/18	73002	W23443B2	41	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/21/18	73002	W23443A2	41	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	11/21/18	73002	W23443B2	41	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/21/18	73002	W23443A2	41	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/21/18	73002	W23443A2	41	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07749-037	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	FB-20181112	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	11/15/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	11/27/18	730022	718BNEW	47	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/27/18	730022	718BNEW	47	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/27/18	730022	718BNEW	47	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/27/18	730022	718BNEW	47	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/27/18	730022	718BNEW	47	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/27/18	730022	718BNEW	47	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	11/27/18	730022	718BNEW	47	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/27/18	730022	718BNEW	47	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 11/21/18
Data File: SW23443A2
Prep Batch: 73002
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8111516

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-291821-6	CCB V-291821-12	CCB V-291821-23	CCB V-291821-33	CCB V-291821-43	MB 73002 (1)-13		
Aluminum	.1 U	.2 U	.2 U	.2 U	.2 U	.1 U		
Barium	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U		
Calcium	2.5 U	5 U	5 U	5 U	5 U	2.5 U		
Chromium	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U		
Copper	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U		
Iron	.15 U	.3 U	.3 U	.3 U	.3 U	.15 U		
Manganese	.02 U	.04 U	.04 U	.04 U	.04 U	.02 U		
Nickel	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U		
Silver	.01 U	.02 U	.02 U	.02 U	.02 U	.01 U		
Vanadium	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U		
Zinc	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U		

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 11/21/18
Data File: SW23443B2
Prep Batch: 73002
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8111516

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-291821-6	CCB V-291821-12	CCB V-291821-23	CCB V-291821-33	CCB V-291821-43	MB 73002 (1)-13		
Magnesium	2.5 U	5 U	5 U	5 U	5 U	2.5 U		
Potassium	2.5 U	5 U	5 U	5 U	5 U	2.5 U		
Sodium	2.5 U	5 U	5 U	5 U	5 U	2.5 U		

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 11/27/18
Data File: A112718BNEW
Prep Batch: 73002
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8111516

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-292469-10	CCB V-292469-16	CCB V-292469-28	CCB V-292469-40	CCB V-292469-50	MB 73002-17		
Antimony	.75 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U		
Arsenic	.5 U	1 U	1 U	1 U	1 U	1 U		
Beryllium	.25 U	.5 U	.5 U	.5 U	.5 U	.5 U		
Cadmium	.5 U	1 U	1 U	1 U	1 U	1 U		
Cobalt	.5 U	1 U	1 U	1 U	1 U	1 U		
Lead	.75 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U		
Selenium	2.5 U	5 U	5 U	5 U	5 U	5 U		
Thallium	.5 U	1 U	1 U	1 U	1 U	1 U		

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 11/27/18
Data File: A112718DNEW
Prep Batch: 73003
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8111516

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-292469-10	CCB V-292469-16	CCB V-292469-28	CCB V-292469-40	CCB V-292469-49	MB 73003-17		
Antimony	.75 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U		
Arsenic	.5 U	1 U	1 U	1 U	1 U	1 U		
Beryllium	.25 U	.5 U	.5 U	.5 U	.5 U	.5 U		
Cadmium	.5 U	1 U	1 U	1 U	1 U	1 U		
Cobalt	.5 U	1 U	1 U	1 U	1 U	1 U		
Lead	.75 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U		
Selenium	2.5 U	5 U	5 U	5 U	5 U	5 U		
Thallium	.5 U	1 U	1 U	1 U	1 U	1 U		

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 11/27/18
Data File: SW23444A2
Prep Batch: 73003
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8111516

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-291821-7	CCB V-291821-13	CCB V-291821-24	CCB V-291821-33	CCB V-291821-43	MB 73003 (1)-14		
Aluminum	.1 U	.2 U	.2 U	.2 U	.2 U	.1 U		
Barium	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U		
Calcium	2.5 U	5 U	5 U	5 U	5 U	2.5 U		
Chromium	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U		
Copper	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U		
Magnesium	2.5 U	5 U	5 U	5 U	5 U	2.5 U		
Manganese	.02 U	.04 U	.04 U	.04 U	.04 U	.02 U		
Nickel	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U		
Silver	.01 U	.02 U	.02 U	.02 U	.02 U	.01 U		
Vanadium	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U		
Zinc	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U		

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 11/27/18
Data File: SW23466B2
Prep Batch: 73003
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8111516

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-291821-6	CCB V-291821-12	CCB V-291821-23	CCB V-291821-31	CCB V-291821-42	CCB V-291821-51	CCB V-291821-61	MB 73003 (1)-32
Iron	.15 U	.3 U	.3 U	.3 U	.3 U	.3 U	.3 U	.15 U
Potassium	2.5 U	5 U	5 U	5 U	5 U	5 U	5 U	2.5 U
Sodium	2.5 U	5 U	5 U	5 U	5 U	5 U	5 U	2.5 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 11/29/18
Data File: H23443SW
Prep Batch: 73002
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8111516

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-21	CCB-32	CCB-39	MB 73002 (1)-11			
Mercury	.5 U	.5 U	.5 U	.5 U	.5 U			

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 11/29/18
Data File: H23444SW
Prep Batch: 73003
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8111516

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-38	MB 73003 (1)-11			
Mercury	.5 U	.5 U	.5 U	.5 U	.5 U			

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 73003

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: AQUEOUS SampleID: AD07749-018

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	1	SW23444	21	SW23444	17	5.0995	0.2U	5.000	102		75	125
Barium	1	SW23444	21	SW23444	17	0.5307	0.05U	.5	106		75	125
Calcium	1	SW23444	21	SW23444	17	94.3912	45.9249	50.0	97		75	125
Chromium	1	SW23444	21	SW23444	17	0.5118	0.05U	.5000	102		75	125
Copper	1	SW23444	21	SW23444	17	0.5185	0.05U	0.5	104		75	125
Iron	1	SW23466	39	SW23466	35	5.6849	0.3131	5.0	107		75	125
Magnesium	1	SW23444	21	SW23444	17	54.0670	5U	50.0	108		75	125
Manganese	1	SW23444	21	SW23444	17	0.5882	0.0819	.5000	101		75	125
Nickel	1	SW23444	21	SW23444	17	0.5136	0.05U	.5000	103		75	125
Potassium	1	SW23466	39	SW23466	35	55.7537	5U	50	112		75	125
Silver	1	SW23444	21	SW23444	17	0.0521	0.02U	0.100	52	a	75	125
Sodium	1	SW23466	39	SW23466	35	77.8366	27.6371	50	100		75	125
Vanadium	1	SW23444	21	SW23444	17	0.5105	0.05U	.5000	102		75	125
Zinc	1	SW23444	21	SW23444	17	0.5174	0.05U	0.500	103		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 73002

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 73002

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	73002	SW23443	15	SW23443	14	5.4447	5.4747	.55	20
Barium	73002	SW23443	15	SW23443	14	0.5322	0.5351	.55	20
Calcium	73002	SW23443	15	SW23443	14	53.1329	53.3256	.36	20
Chromium	73002	SW23443	15	SW23443	14	0.5338	0.5365	.51	20
Copper	73002	SW23443	15	SW23443	14	0.5390	0.5388	.048	20
Iron	73002	SW23443	15	SW23443	14	5.3740	5.4472	1.4	20
Magnesium	73002	SW23443	15	SW23443	14	53.0759	53.2416	.31	20
Manganese	73002	SW23443	15	SW23443	14	0.5307	0.5303	.09	20
Mercury	73002	H23443S	13	H23443S	12	10.2200	10.3900	1.6	20
Nickel	73002	SW23443	15	SW23443	14	0.5374	0.5388	.25	20
Potassium	73002	SW23443	15	SW23443	14	52.3567	52.0615	.57	20
Silver	73002	SW23443	15	SW23443	14	0.1060	0.1065	.48	20
Sodium	73002	SW23443	15	SW23443	14	52.8381	52.6979	.27	20
Vanadium	73002	SW23443	15	SW23443	14	0.5355	0.5364	.16	20
Zinc	73002	SW23443	15	SW23443	14	0.5307	0.5339	.61	20

TxtQcType: MR Matrix: AQUEOUS SampleID: AD07749-015

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	73002	SW23443	17	SW23443	16	0.2U	0.2U	---	20
Barium	73002	SW23443	17	SW23443	16	0.05U	0.05U	---	20
Calcium	73002	SW23443	17	SW23443	16	48.0343	45.1386	6.2	20
Chromium	73002	SW23443	17	SW23443	16	0.05U	0.05U	---	20
Copper	73002	SW23443	17	SW23443	16	0.05U	0.05U	---	20
Iron	73002	SW23443	17	SW23443	16	0.4762	0.4343	9.2	20
Magnesium	73002	SW23443	17	SW23443	16	5U	5U	---	20
Manganese	73002	SW23443	17	SW23443	16	0.0876	0.0818	6.8	20
Mercury	73002	H23443S	15	H23443S	14	0.50U	0.50U	---	20
Nickel	73002	SW23443	17	SW23443	16	0.05U	0.05U	---	20
Potassium	73002	SW23443	17	SW23443	16	5.5550	5.2702	5.3	20
Silver	73002	SW23443	17	SW23443	16	0.02U	0.02U	---	20
Sodium	73002	SW23443	17	SW23443	16	28.9619	27.3494	5.7	20
Vanadium	73002	SW23443	17	SW23443	16	0.05U	0.05U	---	20
Zinc	73002	SW23443	17	SW23443	16	0.05U	0.05U	---	20

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD07749-017

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	73002	SW23443	19	SW23443	18	5.4037	5.5007	1.8	20
Barium	73002	SW23443	19	SW23443	18	0.5477	0.5577	1.8	20
Calcium	73002	SW23443	19	SW23443	18	96.2350	96.7861	.57	20
Chromium	73002	SW23443	19	SW23443	18	0.5291	0.5380	1.7	20
Copper	73002	SW23443	19	SW23443	18	0.5395	0.5493	1.8	20
Iron	73002	SW23443	19	SW23443	18	5.7851	5.7949	.17	20
Magnesium	73002	SW23443	19	SW23443	18	56.2353	56.9830	1.3	20
Manganese	73002	SW23443	19	SW23443	18	0.6144	0.6263	1.9	20
Mercury	73002	H23443S	17	H23443S	16	10.5600	10.1200	4.3	20
Nickel	73002	SW23443	19	SW23443	18	0.5334	0.5438	1.9	20
Potassium	73002	SW23443	19	SW23443	18	58.2453	57.9637	.48	20
Silver	73002	SW23443	19	SW23443	18	0.1054	0.1071	1.6	20
Sodium	73002	SW23443	19	SW23443	18	78.9357	78.9018	.043	20
Vanadium	73002	SW23443	19	SW23443	18	0.5329	0.5416	1.6	20
Zinc	73002	SW23443	19	SW23443	18	0.5349	0.5456	2	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 73002

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: SD Matrix: AQUEOUS SampleID: AD07749-015

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	73002	SW23443	21	SW23443	16	5	0.0098	0.1073	---		10
Barium	73002	SW23443	21	SW23443	16	5	0.0034	0.0211	19	c	10
Calcium	73002	SW23443	21	SW23443	16	5	9.1007	45.1386	0.81		10
Chromium	73002	SW23443	21	SW23443	16	5	-0.0001	0.0014	---		10
Copper	73002	SW23443	21	SW23443	16	5	0.0001	0.0018	---		10
Iron	73002	SW23443	21	SW23443	16	5	0.0866	0.4343	0.34		10
Magnesium	73002	SW23443	21	SW23443	16	5	0.6037	3.8955	23	a	10
Manganese	73002	SW23443	21	SW23443	16	5	0.0156	0.0818	4.4		10
Nickel	73002	SW23443	21	SW23443	16	5	0.0014	-0.0001	---		10
Potassium	73002	SW23443	21	SW23443	16	5	1.2554	5.2702	19	a	10
Silver	73002	SW23443	21	SW23443	16	5	-0.0005	-0.0005	---		10
Sodium	73002	SW23443	21	SW23443	16	5	5.6086	27.3494	2.5		10
Vanadium	73002	SW23443	21	SW23443	16	5	-0.0002	0.0022	---		10
Zinc	73002	SW23443	21	SW23443	16	5	0.0037	0.0162	---		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

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